

Broadcom BCM56630 Switching Technology



112 GBPS INTEGRATED MULTILAYER ETHERNET SWITCH

Overview

The BCM56630 is Broadcom's seventh-generation of the StrataXGS® product line. It is a highly integrated multilayer switch designed to address new and emerging service provider and enterprise networking applications.

The BCM56630 offers the right combination of cost-effective Ethernet switch technology with the ability to deliver outstanding system solutions for mobile and broadband aggregation equipment. With the ability to dramatically scale the forwarding resources, the BCM56630 can serve a wide variety of roles in the aggregation network, from the access layer to the services edge.

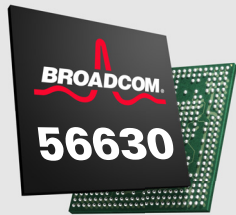
Features

- Seventh-generation of Broadcom Switch Technology, supporting switching and routing
- Nonblocking architecture, line rate for all packet sizes
- Port configurations tailored for highly integrated modular system line cards
- Latest Carrier Ethernet transport protocols: MPLS/VPLS and IEEE 802.1ah (PBB)
- Unified Wireless/Wireline Switching, supporting CAPWAP tunneling and multiple mobility models
- TR-101/156 compliant VLAN translation
- Control plane offload of IEEE 802.1ag CCM: Message initiation and fault monitoring in hardware

- Broadcom time synchronization suite: IEEE 1588v2 hardware support, G.8261-compliant Synchronous Ethernet, and the BroadSync® interface
- Forwarding table expansion via an optional external TCAM
- Broadcom Flexport™ technology for XAUI™/SGMII configuration options

Summary of Benefits

- Highly integrated aggregation layer solution for service provider and enterprise modular as well as fixed configuration systems.
- Delivers the most popular existing and emerging transport protocols in a flexible implementation for protocol bridging applications.
- Supports virtually all QinQ network architectures with comprehensive VLAN manipulations.
- Hardware-based Ethernet OAM support for guaranteed performance; completely alleviates software support of high-bandwidth functions.
- Time synchronization suite provides all the tools necessary to deliver systems for new timing-aware applications like mobile backhaul.
- Dynamic memory technology delivers optimum usage of packet buffer resources.
- Broadcom's Flexports provide on-the-fly transition from 10 GbE to 4 x SGMII.
- Leverages Broadcom's unified API for software reuse and faster time-to-market.

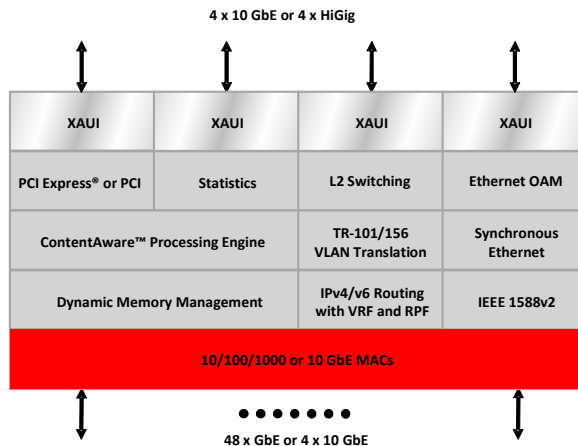


Highlights

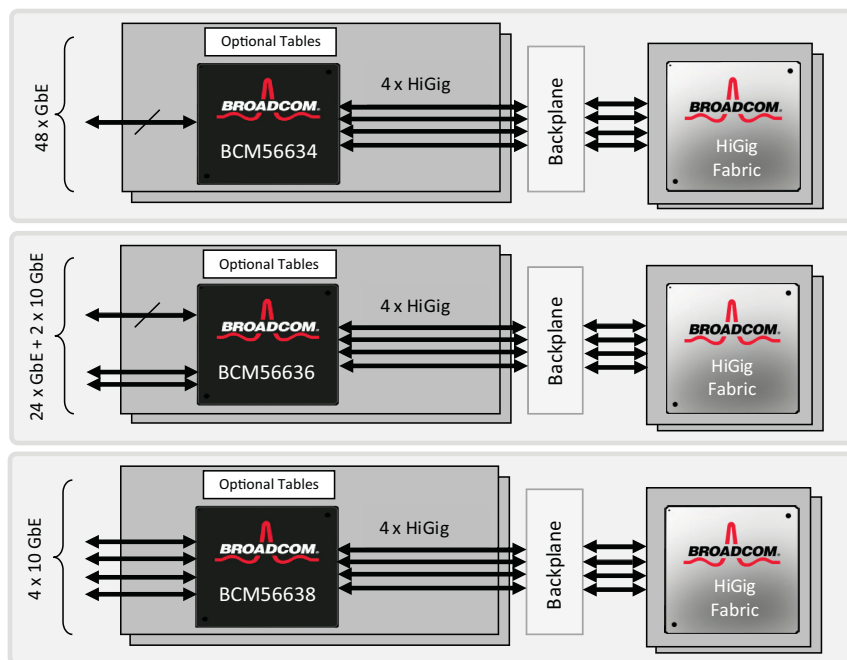
- Ultimate table expansion via external TCAM
- Highest port density, most feature-rich GbE switch
- Comprehensive Enterprise and Metro features for flexible market penetration
- Unifying wired and wireless networking with integrated CAPWAP tunneling capability
- Flexible stacking options with HiGig™ protocol or encapsulated HiGig for transparent L2/L3 tunnel stacking

	BCM56630
Service Provider	●
OTN/PTN	◐
Data Centers	●
Enterprise	●

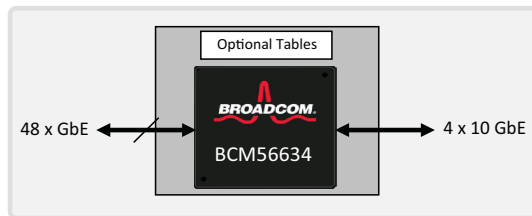
◐ Supported ● Best Choice



Modular Ethernet Line Cards



Single-Chip 48 x GbE + 4 x 10 GbE Fixed Switch



Block Diagram

Ordering Information

Part Number	10/100/1000 Ports	XAUI/HiGig2™ Ports
BCM56630	24	4
BCM56634	48	4
BCM56636	24	6
BCM56638	N/A	8
BCM56639	24	8

About Broadcom

Broadcom Corporation is a major technology innovator and global leader in semiconductors for wired and wireless communications. Broadcom® products enable the delivery of voice, video, data and multimedia to and throughout the home, the office and the mobile environment. We provide the industry's broadest portfolio of state-of-the-art system-on-a-chip and software solutions to manufacturers of computing and networking equipment, digital entertainment and broadband access products, and mobile devices.

These solutions support our core mission: Connecting everything®.

Broadcom, one of the world's largest fabless communications semiconductor companies, with 2010 revenue of \$6.82 billion, holds more than 4,800 U.S. and 2,000 foreign patents, and has more than 7,800 additional pending patent applications, and one of the broadest intellectual property portfolios addressing both wired and wireless transmission of voice, video, data and multimedia.

A FORTUNE 500® company, Broadcom is headquartered in Irvine, Calif., and has offices and research facilities in North America, Asia and Europe. Broadcom may be contacted at +1.949.926.5000 or at www.broadcom.com.

