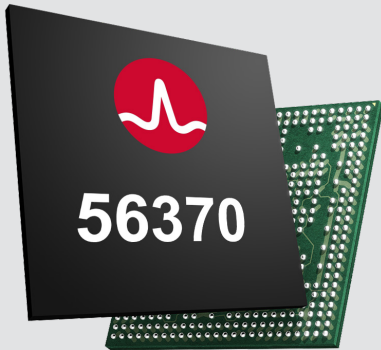


Product Brief



Key Features

- Multigigabit interfaces for IEEE 802.11ac AP connectivity
- 25G/40G/50G/100G uplinks
- 40G/100G stacking
- In-field upgradable with FlexGS™ programmable pipeline
- DC on-ramp with native VxLAN
- BroadScan flow-analytics engine
- Integrated Arm Cortex-A72 processor
- Backward compatible (stackable) with the BCM5634X/BCM5654X-based platforms

BCM56370

560 Gb/s Programmable Multilayer Switch

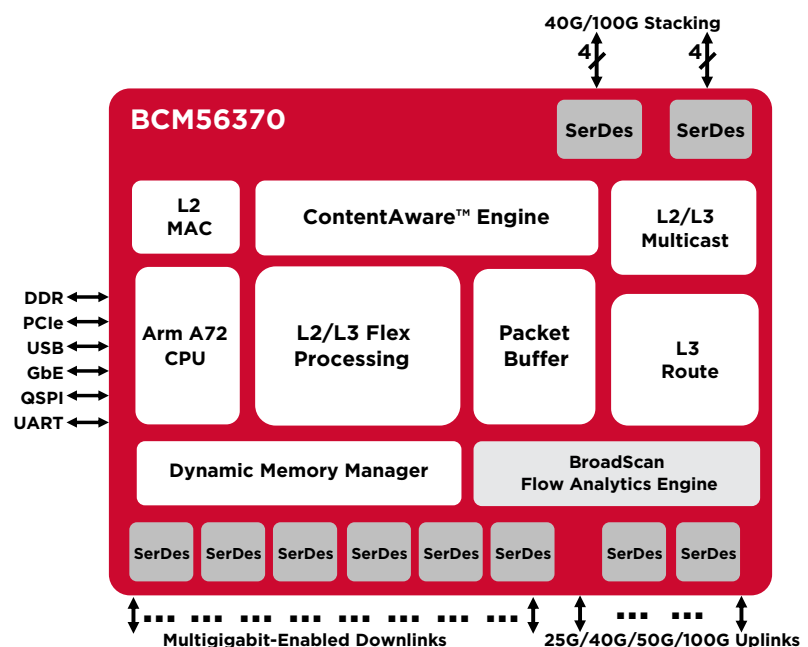
Overview

The Broadcom® BCM56370 is a stackable 48-port multigigabit-Ethernet switch with VxLAN support, programmable pipeline, and a fine-grained BroadScan flow-analytics engine.

Introduction of the BCM56370 heralds a fundamental transformation in the design of enterprise networks. With multigigabit-enabled front-panel ports, a programmable pipeline, VxLAN support, and a highly scalable hardware-based, flow-analytics engine, the BCM56370 is the first Ethernet switch ASIC on the market that simultaneously addresses the rapid increase in bandwidth demand and the transformation of the enterprise network from a simple, static architecture into an intelligent component of an end-to-end, cloud-based network.

A key requirement for the proper operation of this end-to-end architecture is that all of the switches that make up the network, from the largest campus-core systems to the smallest wiring-closet units, must share a common architecture and feature set. To meet this requirement, Broadcom has introduced the StrataXGS® Trident 3 family of switch ASICs (TD3-x), which range in size from 3.2 Tb/s down to 104 Gb/s and provide a unified, field-programmable feature set. The BCM56370 is a member of this family (TD3-x3) and is optimal for stackable, fixed-configuration switches with advanced L2/L3 features.

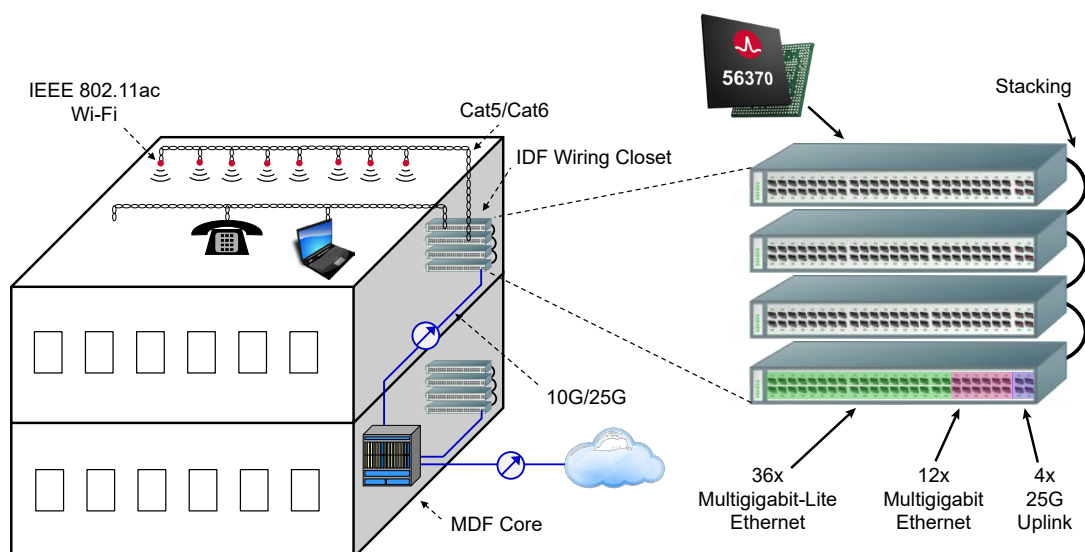
Figure 1: BCM56370 Enterprise Switch ASIC with Programmable Pipeline



Benefits

- TD3-x architecture feature set ensures uniform behavior and optimal performance across the entire enterprise network. In-field pipeline programmability by software-only upgrades enable the installation of new line-rate features while protecting the end customer's long-term investment in equipment.
- Multigigabit-capable front-panel Ethernet ports suitable for connectivity with high-bandwidth IEEE 802.11ae APs.
- VxLAN support for integration into end-to-end and edge-to-data center networks.
- Hardware-based BroadScan flow-analytics engine that provides fine-grained monitoring, policy enforcement, and threat detection for thousands of simultaneous flows. Standards-compliant northbound interfaces enable straightforward integration with third-party flow-collector and flow-analysis platforms.
- Upgraded uplink and stacking ports to accommodate the growing demand for bandwidth in enterprise networks.
- Integrated Arm Cortex-A72 processor offering approximately twice the capacity of the previous generation of Broadcom enterprise switch ASICs.
- Backward compatibility (stackability) with the previous generation of Broadcom enterprise switch ASICs.
- Software Development Kit (SDK), a mature software platform enabling the rapid development of robust and production-ready code.

Figure 2: BCM56370-Based Stackable Enterprise Switch (Typical Deployment Scenario)



Ordering Information

Part Number	Description	BroadScan
BCM56370	48 Multigigabit/Multigigabit-Lite Ethernet Downlink Ports	No
BCM56371	48GbE Downlink Ports	No
BCM56372	28GbE Downlink Ports	No
BCM56375	48 Multigigabit/Multigigabit-Lite Ethernet Downlink Ports	Yes
BCM56376	48GbE Downlink Ports	Yes
BCM56377	28GbE Downlink Ports	Yes

Mouser Electronics

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