

# VSC7434

24x1-Gigabit and 2x10/12 Gbps + 2x 10 Gbps L2 Enterprise Ethernet Switch with High Performance Stacking and 416 MHz CPU

Microsemi's next-generation switch family delivers a comprehensive end-to-end Enterprise Ethernet solution.

The VSC7434 E-StaX-III-68 stackable Enterprise Ethernet switch contains twenty-four 10/100/1000 Mbps Ethernet ports and four 10G XAUI ports. Two of the four XAUI ports can also be configured as two 12 Gbps stacking ports.

VSC7434 provides a rich set of Enterprise Ethernet switching features. Using multistage Versatile TCAM technology (VCAP), it delivers VLAN and QoS processing, enabling the delivery of differentiated services, security through intelligent frame processing, and egress frame manipulation.

The VSC7434 device contains a powerful 416 MHz CPU, enabling full management of both a standalone switch as well as a full stackable Ethernet switch solution.

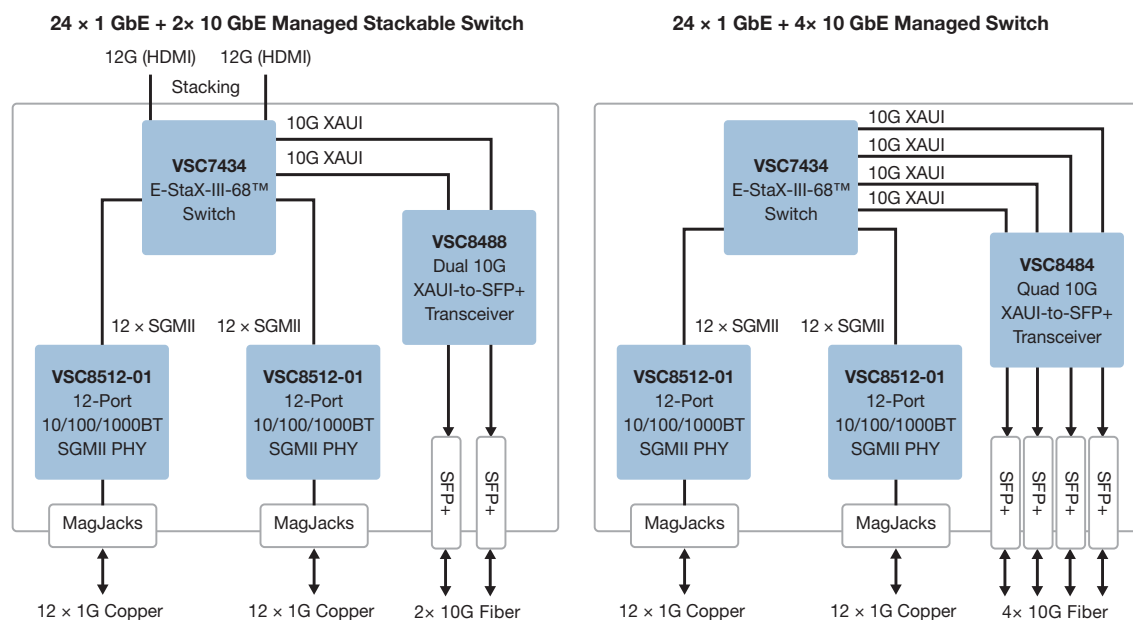
A comprehensive application programming interface (API) and software development package is available for Managed stackable Ethernet applications for faster time-to-market. The software API package integrates easily with third-party software, preserving existing software investments.

## Highlights

- Supports 12G stacking with less than 100 ms failover
- Management of 800 switch ports from a single IP address
- Lowest latency architecture
- New shared buffer memory architecture

## Applications

- Stackable Smart switch
- Fully managed L2/L3 switch
- Fully managed Stackable switch



# VSC7434

24x1-Gigabit and 2x10/12 Gbps + 2x 10 Gbps L2 Enterprise Ethernet Switch with High Performance Stacking and 416 MHz CPU

## Features

- 24x 1 GbE ports with SGMII, 1000BASE-X SerDes, 100BASE-FX
- Up to 8x 2.5 GbE ports
- 4x or 2x 10 GbE XAUI ports supporting four-lane 10 Gbps XAUI or two-lane 10 Gbps VAUI
- 2x 12 Gbps stacking ports supporting four-lane 10 Gbps XAUI or two-lane 10 Gbps VAUI
- Internal shared memory buffer (8 queues per port)
- Jumbo frame support
- Strict priority and DWRR scheduler/shaper
- Integrated 416 MHz MIPS CPU
- 27 mm x 27 mm FCBGA

## Layer 2 Switching and Layer 3 Forwarding

- 802.1Q VLAN switch with 32K MACs and 4K VLANs
- Push, pop, and translate ingress/egress
- Policing with storm control and MC/BC protection
- RSTP and MSTP support
- Independent and shared VLAN learning (IVL, SVL)
- Hardware and software-based learning
- TCAM-based classification and VCAP-II security
- Layer 3 unicast and multicast routing

## Multicast

- Layer 2
- IPv4 and IPv6
- IGMP and MLD

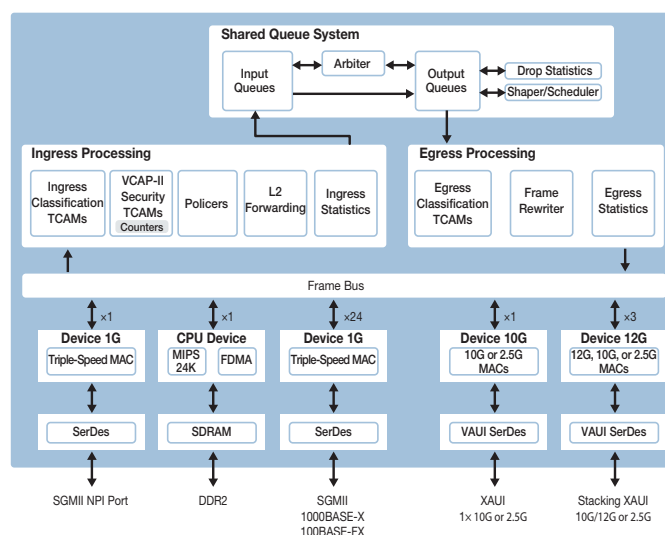
## Stacking

- VStaX™ stacking protocol
- Hardware support for shortest path forwarding
- Fast failover within 100 ms
- 2x 12 Gbps uplink bandwidth using standard cables
- Stacking of up to 16 switches
- Stack-side congestion management

## Related Products

Visit [www.microsemi.com](http://www.microsemi.com) for information about these related products:

- SparX-III nonstackable Gigabit Ethernet switches with integrated copper PHYs
- VSC8512 12-port copper PHY
- VSC8488 and VSC8484 dual and quad 10G optical PHYs



**Microsemi**

**Microsemi Corporate Headquarters**  
 One Enterprise, Aliso Viejo, CA 92656 USA  
 Within the USA: +1 (800) 713-4113  
 Outside the USA: +1 (949) 380-6100  
 Sales: +1 (949) 380-6136  
 Fax: +1 (949) 215-4996  
 email: [sales.support@microsemi.com](mailto:sales.support@microsemi.com)  
[www.microsemi.com](http://www.microsemi.com)

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for communications, defense and security, aerospace, and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs, and ASICs; power management products; timing and synchronization devices and precise time solutions; voice processing devices; RF solutions; discrete components; enterprise storage and communications solutions, security technologies, and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, California, and has approximately 4,800 employees worldwide. Learn more at [www.microsemi.com](http://www.microsemi.com).