

# Ethernet Switch 26-Port 672-Pin HSBGA Tray

Manufacturer:	Microchip Technology, Inc
Package/Case:	BGA
Product Type:	Switches
RoHS:	RoHS Compliant/Lead free RoHS
Lifecycle:	Active



Images are for reference only

Inquiry

# **General Description**

VSC7429 Caracal-2 is the industry's first fully integrated 26-port Ethernet switch with 12 Gigabit Ethernet (GE) copper PHYs in a single package. In conjunction with the VSC8512 12-port PHY, 24/26-port switches can be designed using only two ICs. VSC7429 is based on Virtualized Service Aware Architecture (ViSAA), a silicon implementation that offers an unmatched level of Service Edge and Carrier Ethernet (CE) Networking features. ViSAA achieves wirespeed performance for even the most feature-rich CE services. VSC7429 is intended for Telecom and CE applications, supporting MEF service delivery and timing over packet solutions for IEEE 1588 network timing and Synchronous Ethernet (SyncE).

VSC7429 uses VeriTime, patent-pending timing technology that delivers the industry's most accurate IEEE 1588 network timing and synchronization implementation. The device supports combinations of up to 26 SGMII ports consisting of 12G Cu PHYs, 12 SGMII interfaces, two of which support 1G/2.5G, and up to three QSGMII ports. One of the SGMII ports can be dedicated to the CPU for packet insertion and extraction. VSC7429 meets the IEEE 802.3az Energy Efficient Ethernet requirements for green energy efficient Ethernet through ActiPHY and PerfectReach energy efficient modes. A powerful embedded 416MHz MIPS processor 32-bit CPU with DDR2 external memory and DMA-based frame extraction and insertion supports timing over packet, Ethernet OAM, and performance monitoring.VSC7429 is an excellent choice for Mobile backhaul and Microwave backhaul applications, and for service provider demarcation points in Edge and Access devices. A comprehensive application programming interface (API) and software package are provided for CE applications. The software package integrates easily with third-party software, preserving existing software investments while adding new, enhanced carrier functionality,

## Supported Ethernet Software Options

Microchip's complimentary and confidential LANCheck® online design review service is available for customers who have selected our products for their application design-in. The LANCheck online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

## **Key Features**

VSC6816: SMBStaX Linux Application Software Package for Managed Enterprise Switches VSC6817: IStaX Linux Application Software Package for Managed Ethernet Switches VSC6819: WebStaX Linux Application Software Package for Managed Enterprise Switches GE PHYs 10GE PHYs

Ethernet Software

Integrated Cu PHYs

IEEE 1588 and Synchronous Ethernet network timing

Supports IEEE802.3az and green energy efficiency modes with ActiPHY and PerfectReach

## **Recommended For You**

#### VSC7422XJG-04

Microchip Technology, Inc HSBGA-672

VSC3308YKU

Microchip Technology, Inc BGA

## VSC7420XJQ-02

Microchip Technology, Inc BGA

VSC7420XJG-04 Microchip Technology, Inc 672-BGA

VSC7428XJG-02 Microchip Technology, Inc BGA672

## VSC3316YYP

Microchip Technology, Inc BGA196

VSC7513XKS Microchip Technology, Inc BGA

VSC7420XJG-02 Microchip Technology, Inc HSBGA-672

VSC7425XJG-02 Microchip Technology, Inc BGA

VSC7440XMT Microchip Technology, Inc PBGA-324 VSC3340XJJ-01

Microchip Technology, Inc

BGA484

VSC7420XJQ-04

Microchip Technology, Inc FSTQFP

## VSC7423XJG-02

Microchip Technology, Inc BGA

VSC7512XMY Microchip Technology, Inc QFN-172

VSC7448YIH-02 Microchip Technology, Inc 672-LBGA