VSC7513
8-Port L2 Gigabit Ethernet Switch

Features

- Main configuration: Four dual media copper/SGMII ports
- Integrated 500 MHz MIPS 24KEc CPU with MMU and DDR3/DDR3L SDRAM controller
- PCIe 1.x, and NPI CPU interface
- Internal shared memory buffer (8 queues per port)
- Jumbo frame support
- Strict priority and DWRR scheduler/shaper

Layer 2 Switching

- 802.1Q VLAN switch with 4K MACs and 4K VLANs
- Push/pop/translate up to three VLAN tags on ingress and egress
- Policing with storm control and MC/BC protection
- RSTP and MSTP support
- Independent and shared VLAN learning (IVL, SVL)
- Hardware-based and software-based learning
- TCAM-based classification and VCAP-II security

Multicast

- Layer 2
- IGMP and MLD Snooping

Industrial Ethernet

- Integrated timing: VeriTime™ (1588v2) and SyncE support
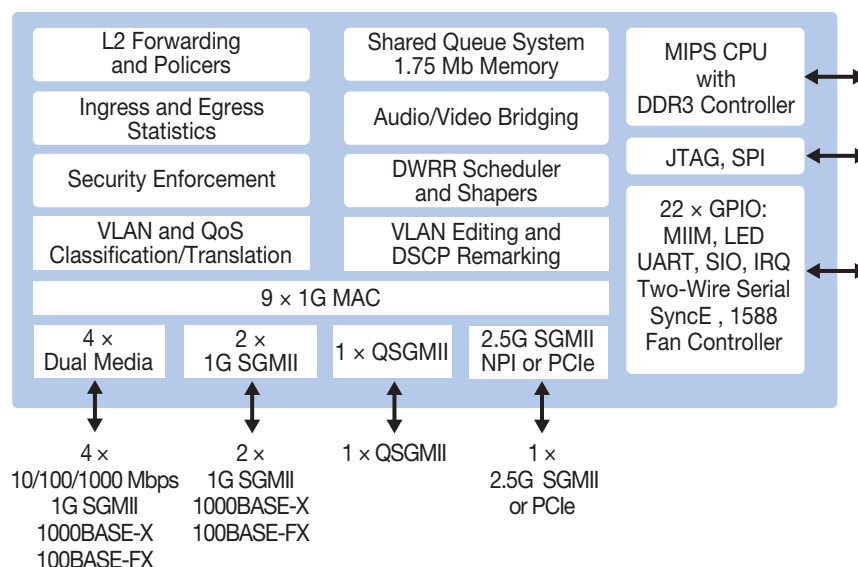- Ethernet ring protection switching (ERPS)

Key Specifications

- 17 mm × 17 mm CABGA package
- –40 °C to 125 °C temperature range

Related Products

Visit www.microsemi.com for information about these related products:

- SparX-IV GbE switches
- VSC8514 copper PHYs
- Unified API, WebStaX, SMBStaX, and IStaX software

L2 Forwarding and Policers | Shared Queue System 1.75 Mb Memory | MIPS CPU with DDR3 Controller
Ingress and Egress Statistics | Audio/Video Bridging | JTAG, SPI
Security Enforcement | DWRR Scheduler and Shapers | 22 × GPIO: MIIM, LED UART, SIO, IRQ Two-Wire Serial SyncE , 1588 Fan Controller
VLAN and QoS Classification/Translation | VLAN Editing and DSCP Remarking |
9 × 1G MAC
4 × Dual Media | 2 × 1G SGMII | 1 × QSGMII | 2.5G SGMII NPI or PCIe

4 × 10/100/1000 Mbps 1G SGMII 1000BASE-X 100BASE-FX | 2 × 1G SGMII 1000BASE-X 100BASE-FX | 1 × QSGMII | 1 × 2.5G SGMII or PCIe

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