



SINGLE-CHIP L2+ MANAGED SWITCH WITH 24 10/100 PORTS + 2 GbE PORTS

FEATURES

- Seventh-generation ROBO L2+ 24FE + 2GE switch with two GMII/RGMII/TBI interfaces
- Twenty-four fully integrated 10/100 PHYs with support of Advanced Cable Diagnostics in the Broadcom PHY technology
- QoS packet classification supports four priority queues
- Port-based VLAN and 802.1Q VLAN with 4k entries
- Supports traffic aggregation via double tagging
- Spanning Tree (IEEE 802.1D/1s/1w)
- MAC-based Trunking with automatic link failover
- Port mirroring
- IGMP snooping Layer2/3
- Over 70 MIB counters for per port management statistics
- Up to 24 Static Secure MAC addresses per port
- Programmable Broadcast, Multicast, and Unknown Unicast storm control
- Per port Bandwidth/Rate Control
- 8K MAC addresses with automatic learning and aging
- Protected Port
- Multicast Address table for 256 entries
- 25th FE port via MII or Reversed MII mode for management
- MDC/MDIO and SPI interfaces
- Internal oscillator simplifies design and reduces cost
- JTAG
- Embedded 2.5V and 1.2V regulator, typical power consumption: 3.5W
- 400-pin PBGA package

SUMMARY OF BENEFITS

- **The BCM5324M includes:**
 - Twenty-four 10/100 transceivers for TX/FX
 - Twenty-four media access controllers
 - Two Gigabit media access controllers
 - 3 Mb total of packet buffer and control memory
 - Non-blocking switch fabric supports up to 24 FE+2 GE ports
- **Advanced Cable Diagnostics minimize the need for expensive cable troubleshooting equipment.**
- **Enables a new generation of lower cost FE switches with the highest integration of enhanced L2+ features and maximum connectivity.**
- **Optimized for WebSmart managed switch design.**
- **802.1Q VLAN allows segmentation of network into smaller broadcast domains to preserve bandwidth and increase network security.**
- **Four flexible Class of Service (CoS) queues per port assures the lowest latency to high-priority traffic. This enables the switch to support a wide variety of delay sensitive video and audio multicast applications.**
- **IEEE 802.3ad link aggregation increases effective bandwidth and provides redundancy of a link.**
- **IEEE 802.1X Extensive Authentication Protocol over LAN (EAPOL) plus MAC address locking enhances network port security.**
- **Storm and Bandwidth/Rate Control provide better traffic profile management.**
- **Access to all internal registers through SPI or MDC/MDIO interfaces.**
- **Hardware support for implementing SNMP and RMON.**
- **Low-power consumption and small package allow simple PCB design.**