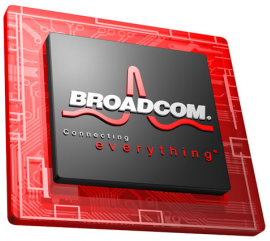
BROADCOM®
Connecting everything®

BCM5384 PRODUCT Brief



4GE PORT SWITCH WITH INTEGRATED GE COPPER PHY

FEATURES

- Highest silicon integration level achieved for an 4-port, 10/100/1000 Ethernet switch device
- Seventh-generation switch on a chip
- Integrates:

  Four 10/100/1000 transceivers (802.3ab compliant)

  Four MACs (802.x compliant) with support for 9 Kbyte Jumbo Frames

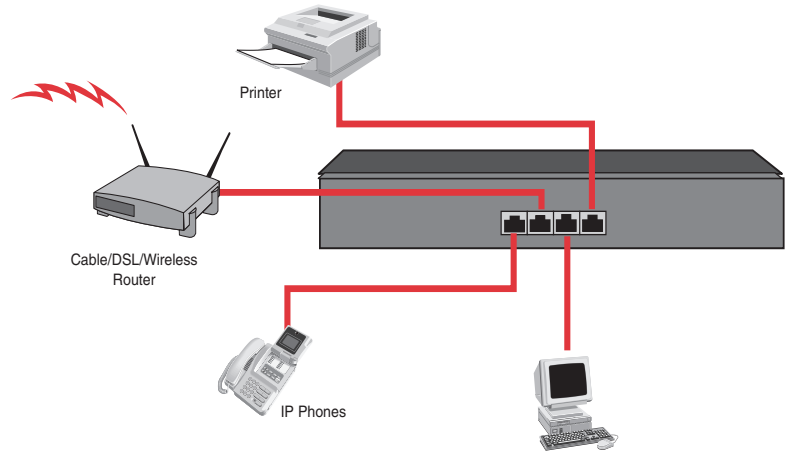
  Nonblocking four Gigabit Ethernet fully integrated switch fabric

  SPI Interface for easy setup and smart unmanaged operation
- Classifies packets using four 802.1p QoS or DiffServ/TOS priority queues
- VLAN 4k 802.1Q or port-based supported
- Supports up to 8k unicast MAC addresses
- Supports MAC-based port aggregation (trunking)
- Flow control: full-duplex (802.3x) and half-duplex options supported
- Supports automatic address learning and aging
- Internal oscillator circuit
- Low power 0.13 µm 1.2 V CMOS core: <3.5W Pd.
- Fanless operation supported
- Integrated voltage regulator for simplified power supply design
- 324-pin FBGA package (small form factor 19 mm x 19 mm)

SUMMARY OF BENEFITS

- Industry-first single-chip solution for four Gigabit Ethernet.
- Enables a new generation of lower-cost switches with Gigabit connectivity and much smaller form factors.
- Uses field-proven industry-standard 10/100/1000BASE-T transceivers-lowers overall system interoperability and reliability risks.
- Provides the most cost effective Gigabit Ethernet connectivity to the desktop for all remote, branch, and home office needs.
- 802.1Q tag VLAN, trunking, and 802.1p priority enables the switch to be designed into a wide variety of applications from unmanaged to smart switch.
- Jumbo frame support allows the device to be connected to corporate server farms and networks while maintaining maximum TCP/IP performance.
- CPUs are not required to initialize and run in cost-sensitive unmanaged applications, providing true Plug and Play connectivity.
- Internal oscillator circuit simplifies design and reduces overall system cost.
- On-chip HP auto-MDI/MDIX on all transceivers automatically detects and corrects for crossover cables and allows direct switch-to-switch connection.
- Lowest possible system cost through minimized number of components.
- Higher system reliability and noise reduction due to elimination of component with lowest MTBF (the fan).

4 Gigabit Ethernet Ports for SOHO and Subnetwork Applications



BROADCOM.