BCM5315
PRODUCT
Brief

5-PORT 10/100 SWITCH WITH ON-CHIP PACKET BUFFER

BCM5315 FEATURES

- The highest level of silicon integration achieved for a 5-port 10/100 Ethernet switch device
- The world's first single-chip switch
- The BCM5315 integrates:
  - Five transceivers (802.3u compliant)
  - Six media access controllers (802.x compliant)
  - 256 KB packet buffer
  - Non-blocking switch fabric
- Non-blocking switch fabric through a 2.6-Gbps expansion port, cascading up to three devices
- MII interface supports an additional 100FX or 100TX connection enabling a sixth user port
- Supports up to 4K MAC addresses
- Flow control: full-duplex (802.3x) and half-duplex options supported
- Supports automatic address learning and aging
- Typical power consumption: < 2.2W
- 208-pin PQFP package
- Optional management features:
  - Low-cost MIB Autocast™ function
  - Hardware support for Simple Network Management Protocol (SNMP), Remote Network Monitoring (RMON) and Spanning Tree

SUMMARY OF BENEFITS

- Enables a new generation of lower cost 10/100 switches in much smaller form factors.
- Utilizes field-proven industry-standard 10BASE-T/100BASE-TX Fast Ethernet transceivers–lowering overall system interoperability and reliability risks.
- Flexible interfaces support a wider variety of application needs–fiber for long distances or an additional 100TX port.
- Sufficient address range handles all remote office, branch office and home office needs.
- Flexible architecture enables high engineering leverage when designing multiple platforms.
- CPUs are not required to initialize and run in cost-sensitive unmanaged applications–providing true Plug and Play connectivity.
- Very low power and small footprint enables more cost-effective system options.
- Ability to gather and support basic management statistics using a very low-cost microcontroller.
- Low-cost management using the on-chip MIB registers allows the collection and transmission of statistics for each port and allows an upward migration path for corporate users.
- On-chip HP auto-MDI/MDIX feature automatically detects and corrects for crossover cables and allows direct switch-to-switch connection.

Lowest Cost 5-Port Unmanaged 10/100 Switch