

10/100BASE-TX/FX HEX-Φ™ TRANSCEIVER

BCM5226 FEATURES

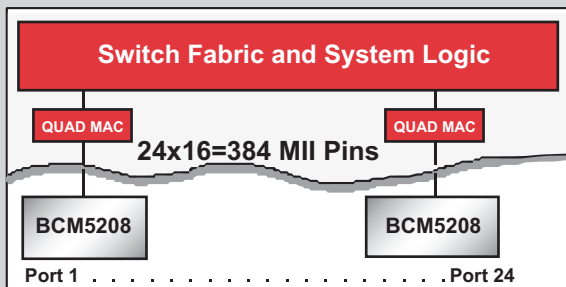
- Single-chip six-port Fast Ethernet transceiver
- HP Auto-MDIX
- Low-power 2.5V CMOS technology
- Compatible with 2.5V I/O and 3.3V I/O
- Reduced Media Independent Interface (RMII)
- Serial Media Independent Interface (SMII)
- Fully integrated digital adaptive equalization
- On-chip multimode transmit waveshaping
- Edge-rate control eliminates external filters
- Integrated baseline wander correction
- Full-duplex support
- Twisted-pair or fiber support on any or all ports
- Interrupt output capability
- Loopback mode for diagnostics
- 160-pin PQFP (BCM5226R)
- 128-pin PQFP (BCM5226S)
- Proven Broadcom proprietary DSP Digi-Φ™ architecture

SUMMARY OF BENEFITS

- Target usage: Fast Ethernet switches.
- Low power < 300 milliwatts per port.
- Auto-MDIX detects and corrects cabling errors.
- Provides robust performance over a broad range of operating conditions.
- Single-chip device contains six independent Fast Ethernet transceivers.
- Performs all physical layer interface functions for 100BASE-TX full-duplex or half-duplex Ethernet on Category 5 twisted-pair cable and 10BASE-T full- or half-duplex Ethernet on Category 3, 4, or 5 cable.
- Permits transmission over fiber-optic cabling when paired with an external fiber-optic transceiver.
- Compliant with IEEE 802.3 standard.
- IEEE 1149.1 (JTAG) scan chain support.

Quad BCM5208 Versus HEX BCM5226 Comparison

6 Active PHY components
+ 6 MACs including switch fabric



4 Active SMII PHY components
+ SMII MACs embedded in switch chip

