BCM5208

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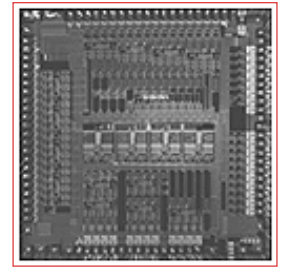
PRODUCT Brief

BCM5208 10/100BASE-TX QUAD-Φ™ TRANSCEIVER

BCM5208 FEATURES

- The Broadcom® BCM5208 is a Quad-Φ 10/100BASE-T Transceiver that contains four 10BASE-T/100-BASE-TX transceivers
- 10BASE-T/100BASE-TX/FX IEEE 802.3u-compliant
- Full-duplex Support in All Modes
- IEEE 802.3u-compliant Auto-Negotiation
- Media Independent Interface (MII) for Each Port
- Shared MII Serial Management Interface
- Fully-integrated Digital Adaptive Equalizers
- 125 MHz Clock Generator and Timing Recovery
- Integrated Multimode Transmit Wave Shaping
- Integrated Baseline Wander Correction
- Carrier Integrity Monitor on Each Port
- Port Switching for Multisegment Repeaters
- MII Repeater Mode Support in All Modes
- LED Status Pins
- Loop-back Mode for Diagnostics
- IEEE 1149.1 (JTAG) Support
- 3.3V Power Supply
- 208-Pin PQFP Package

SUMMARY OF BENEFITS

- **Fully-integrated TX/FX Quad PHY Transceiver (MII to TX Magnetics/FX Optics)**
  - Increases system port density
  - Decreases system cost per port
  - Simplifies system and board design
  - Reduces power consumption
- **On-chip Multimode Transmit Wave Shaping**
  - Eliminates need for external filters
  - Minimizes EMI
- **Flexible Ethernet PHY Solution:**
  - 10BASE-T, 100BASE-TX or 100BASE-FX full-duplex
  - Suited for both Ethernet switch and repeater products
- **Digital Adaptive Equalization and Clock Recovery**
  - Increases SNR by 3dB over ideal analog equalizers
  - Robust performance in harsh noise environments and over sub-standard cable
  - Immune to on-chip noise and crosstalk
  - Insensitive to variations in process, temperature and voltage

24-Port 10/100BASE-T Ethernet Switch Example