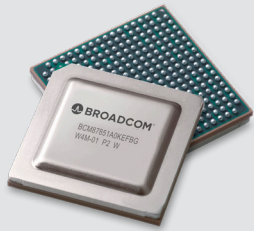


Product Brief



Features

- Single chip for 400GbE active copper cable QSFP112
- Auto-negotiation and link training on the line side
- VSR+ capable up to 22-dB loss
- Continuous auto-adaptive equalizers
- Integrated AC-coupling capacitors on the host-side and line-side receiver
- Line-side and host-side loopbacks
- PRBS generators and checkers
- Low-power 7-nm CMOS design
- Supports QSFP112 copper modules
- Power consumption 3W

Applications

- Supports 400G active electrical cable and 400G active copper cable applications

BCM87851

7-nm 4 x 100G PHY for Active Copper Cable Applications

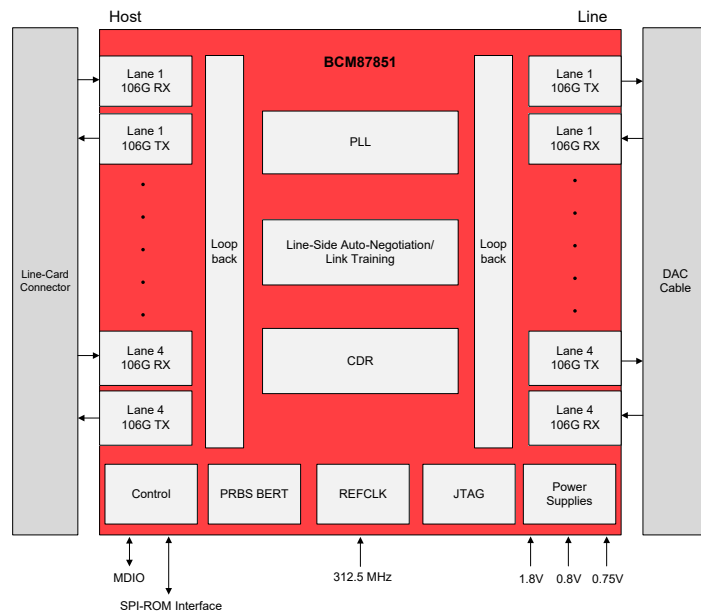
Overview

The Broadcom® BCM87851 is a single-chip, four-lane, ultra-low power, ultra-low latency PHY that integrates retimer and equalizer to support active cable applications. The BCM87851 is capable of equalizing 22 dB of loss on both the client-side and line-side interfaces. Each lane is capable of multiple data rates, including 106.25 Gb/s.

The on-chip clock synthesis is performed by a low-cost 312.5-MHz reference clock through high-frequency, low jitter phase-locked loops (PLLs).

The BCM87851 is fabricated in low-power 7-nm CMOS technology and is available in a 12 mm × 12 mm, 0.5-mm pitch, 485-ball BGA, RoHS-compliant package.

Functional Block Diagram



Ordering Information

Part Number	Package
BCM87851A0KEFBG	12 mm × 12 mm, 485-ball BGA, RoHS-6 compliant