Product Brief

ChronoPHY™ Ethernet Transceivers

10GBASE-T/5GBASE-T/2.5GBASE-T/1000BASE-T/100BASE-TX Physical Layer Ethernet Transceivers

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Description

The ChronoPHY™ series of multi-rate 10GBASE-T / 5GBASE-T / 2.5GBASE-T / 1000BASE-T / 100BASE-TX Ethernet PHY transceivers offer extended reach, great interference immunity, advanced timing features with great power efficiency. Designed to elevate network performance, these PHYs are ideally suited for applications upgrading from Gigabit ethernet to higher speeds such as 2.5G, 5G, and 10G using CAT6A or existing CAT5e cabling. Typical applications include broadband access, computing, and a wide range of industrial applications.

Designed with advanced timing and DSP architecture, the ChronoPHY™ series takes robustness, ease of use and synchronization precision to the next level. It seamlessly integrates IEEE1588v2 functions with easy interface to controllers. To minimize system cost while maintaining performance, the PHYs come with built-in jitter filtering, and an any-rate low jitter clock output empowering the latest networks. With 1 nanosecond time stamping accuracy at the wire, and minimal latency variation, these transceivers can enable Precision Time Protocol (PTP) implementations to achieve system synchronization precision of less than 1ns.

The ChronoPHY™ series are available in 2 small packages, 7x7mm BGA81 and 11x11mm BGA169 and support 40°C to +85°C operation.

Block Diagram