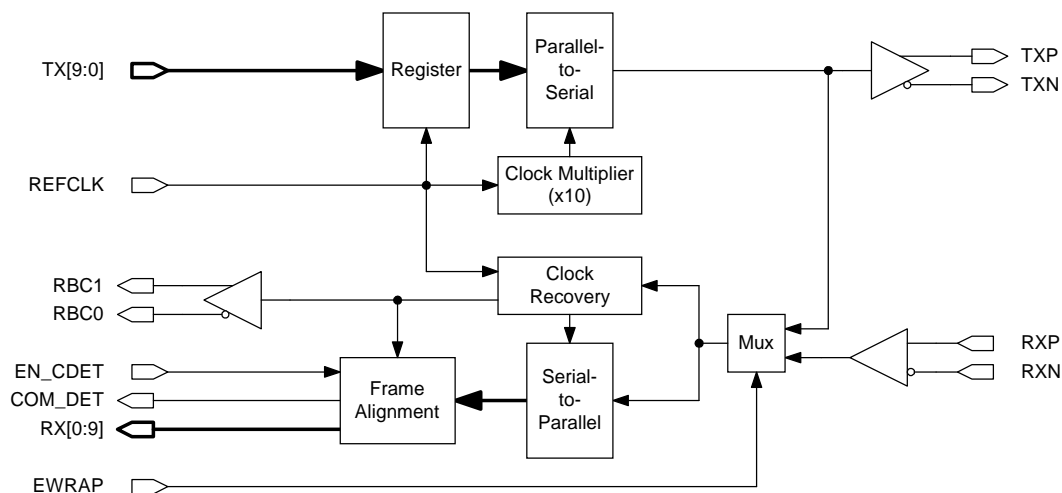## Product Summary

Features

- ANSI X3T11 Fibre Channel Compatible
- 1.0625 Gbps Data Rate
- 106.25 MHz TTL Reference Clock
- Integrated Transmitter and Receiver Functions
- Monolithic Clock Synthesis and Recovery Requires No External Components
- 10-Bit TTL Compatible Parallel Interfaces
- Loopback Mode
- Single +3.3V Supply Operation
- Low Power Operation (<500mW Typical)
- Packaged in 64-Pin 14mm PQFP
- Compatible with Industry Standard SERDES Devices
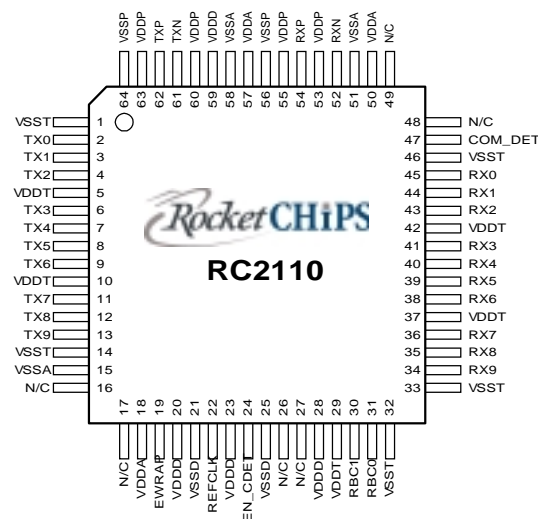
Overview

The RC2110 is designed for use in high-speed point-to-point serial communications applications. It is compatible with the ANSI X3T11 Fibre Channel specification. The transmitter section of the RC2110 accepts a 10-bit parallel data stream and outputs the data serially at 10 times the reference clock frequency. The receiver section of the RC2110 accepts a differential serial input stream, extracts the incoming clock and data, and outputs the recovered data on a 10-bit TTL parallel interface. Receiver word aligned is supported via incoming Comma detection (RX[0:9] = 0011111XXX). The Clock Synthesis and Clock Recovery circuits are fully monolithic, requiring no external components, such as loop filter capacitors. The highly integrated, fully CMOS design enables a low operational power of less than 500mW (typical) and requires a minimum of board space. All interfaces are TTL compatible.

Block Diagram

Patent pending