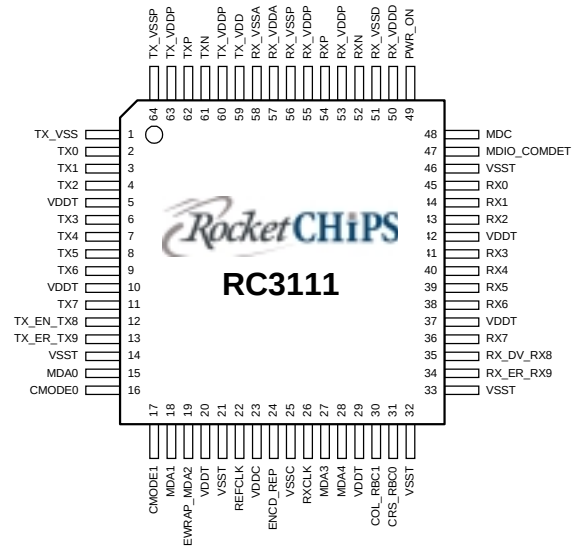


Features

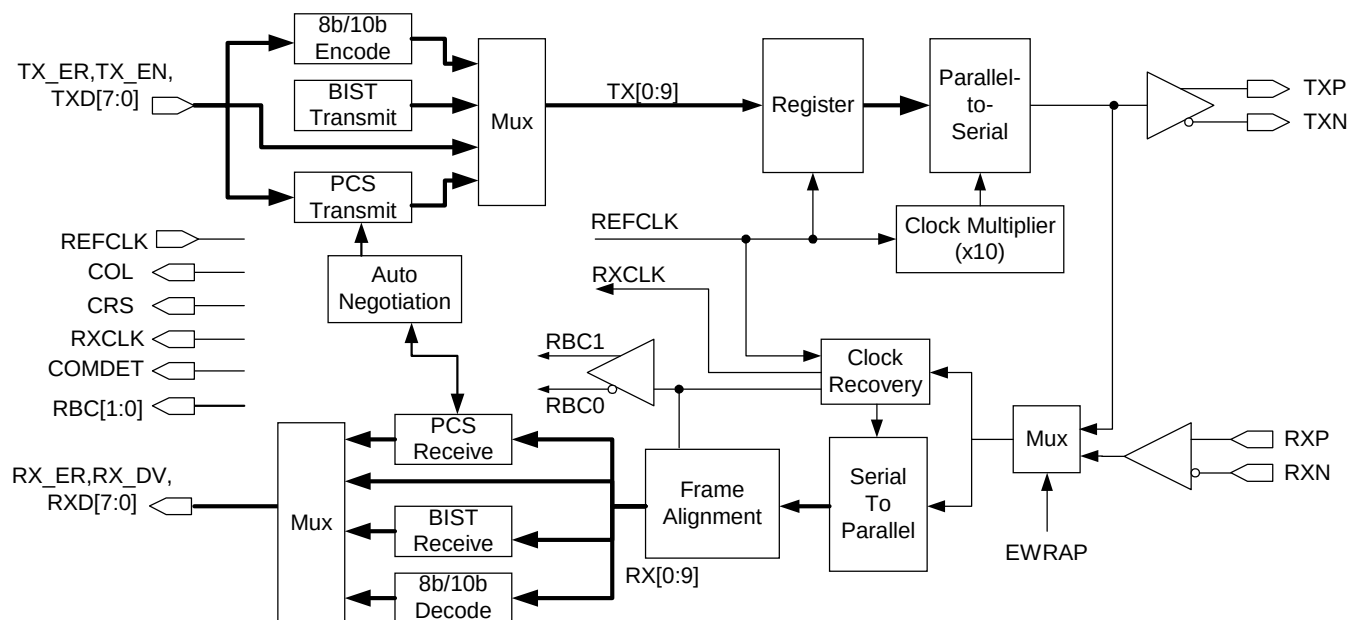
- IEEE 802.3z Gigabit Ethernet Compatible (1000Base-X)
- 1.25 Gbps Data Rate
- 125 MHz TTL Reference Clock
- Integrated Transmitter and Receiver Functions
- Monolithic Clock Synthesis and Recovery Requires No External Components
- 8-Bit GMII Compatible Interface (TTL)
- Loopback Mode
- Single +3.3V Supply Operation
- Low Power Operation (<500mW Typical)
- Packaged in 64-Pin 14mm PQFP



Overview

The RC3111 implements the Physical Coding Sub-layer (PCS) and Physical Media Attachment (PMA) layers as defined in the IEEE 802.3z Gigabit Ethernet specification for 1000Base-X. The PCS consists of the Transmit, Receive, Collision Detection, Carrier Sense, Auto-Negotiation, Synchronization, 8b/10b Encode/Decode and Station Management functions. The PMA layer contains the Serialize and De-serialize functions. 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.

Block Diagram



Patent Pending