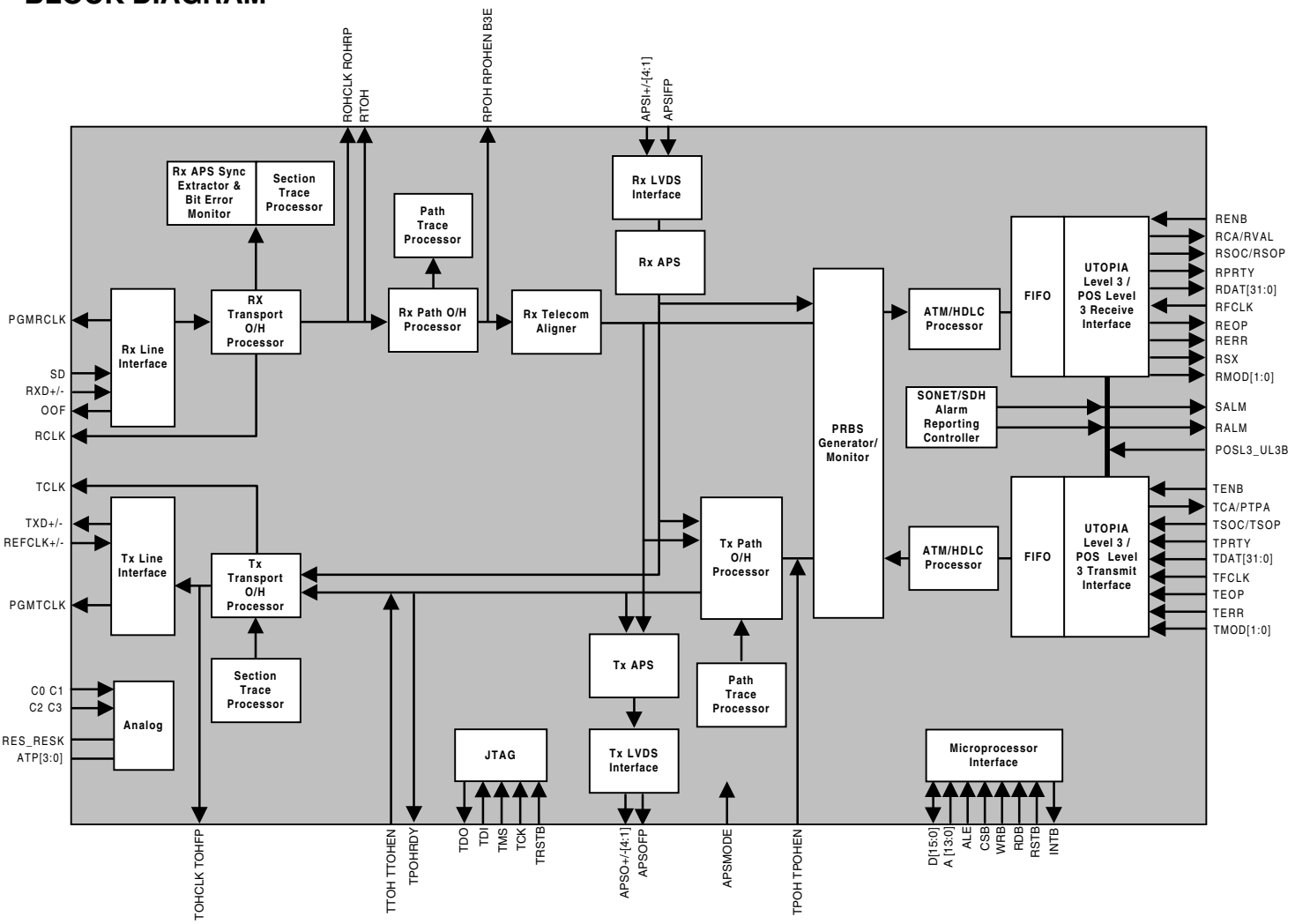
# SATURN® User Network Interface for 2488 Mbit/s

## FEATURES

- Single chip ATM and POS User-Network Interface operating at 2488.32 Mbit/s.
- Implements the ATM Forum User Network Interface Specification and the ATM physical layer for Broadband ISDN according to CCITT Recommendation I.432.
- Implements the Point-to-Point Protocol (PPP) over SONET/SDH specification according to RFC 2615(1619)/1662 of the PPP Working Group of the Internet Engineering Task Force (IETF).
- Processes bit-serial 2488.32 Mbit/s STS-48 (STM-16-16c) data streams with on-chip clock and data recovery and clock synthesis.
- Complies with Bellcore GR-253-CORE jitter tolerance, jitter transfer and intrinsic jitter criteria.
- Provides termination for SONET Section, Line and Path overhead or SDH Regenerator Section, Multiplexer Section and High Order Path overhead.
- Provides UTOPIA Level 3 32-bit wide System Interface (clocked up to 104 MHz) with parity support for ATM applications.
- Provides SATURN POS-PHY Level 3™ 32-bit System Interface (clocked up to 104 MHz) for Packet over SONET (POS), or ATM applications.
- Supports line loopback from the line side receive stream to the transmit stream and diagnostic loopback from the line side transmit stream to the line side receive stream interface.
- Provides support for automatic protection switching including a bi-directional 4-bit LVDS 777.76 MHz port.
- Provides a standard five signal IEEE 1149.1 JTAG test port for boundary scan board test purposes.
- Provides a generic 16-bit microprocessor bus interface for configuration, control, and status monitoring.

## BLOCK DIAGRAM






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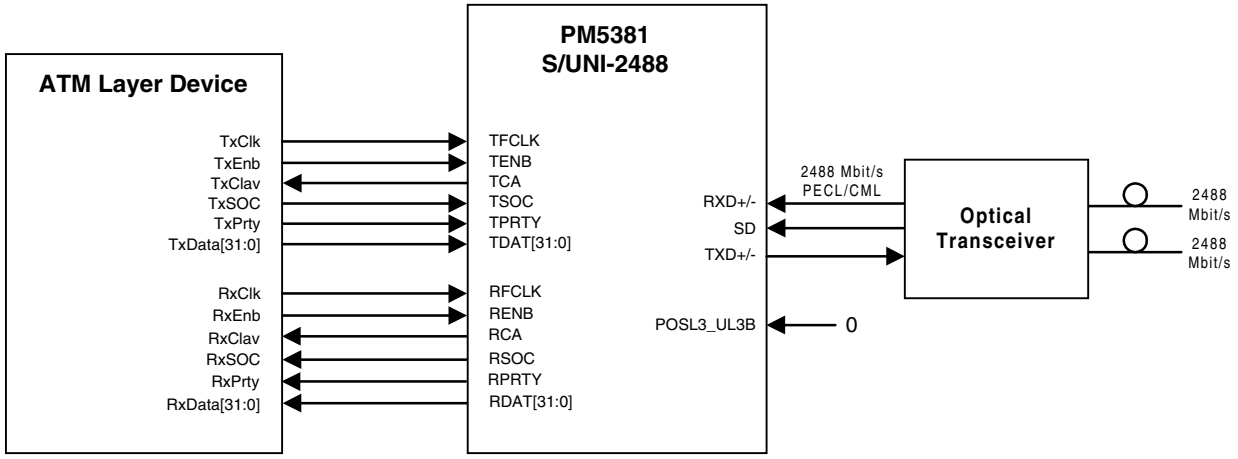
- Low power 1.8 V CMOS core logic with 3.3 V CMOS/TTL compatible digital inputs and digital outputs. High speed inputs and outputs are 3.3 V PECL/CML compatible.
- Industrial temperature range (-40° C to +85° C).
- 416 pin UBGA package.

## APPLICATIONS

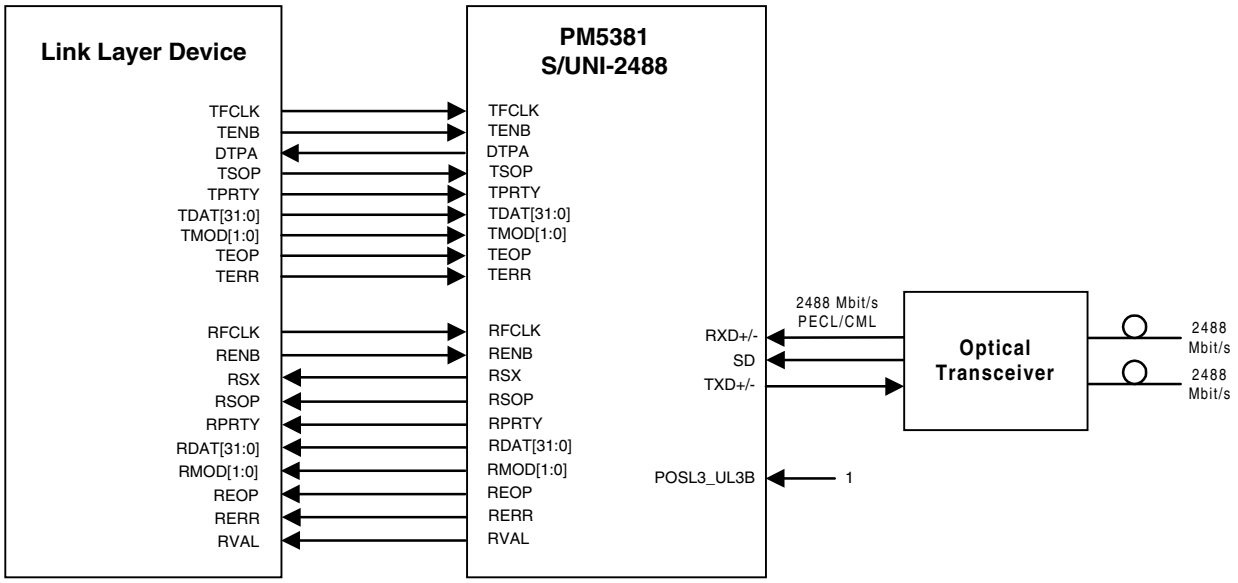
- ATM and Multiservice Switches, Routers, and Switch/Routers.
- SONET/SDH Add/Drop Multiplexers with data processing capabilities
- Uplink Cards.
- SONET/SDH ATM/POS Test Equipment.

## TYPICAL APPLICATION

### *STS-48 (STM-16-16C) ATM (UTOPIA LEVEL 3) SWITCH PORT APPLICATION*




### *STS-48 (STM-16-16C) PACKET OVER SONET (POS-PHY LEVEL 3) ROUTER APPLICATION*




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