

SATURN User Network Interface for PDH Applications

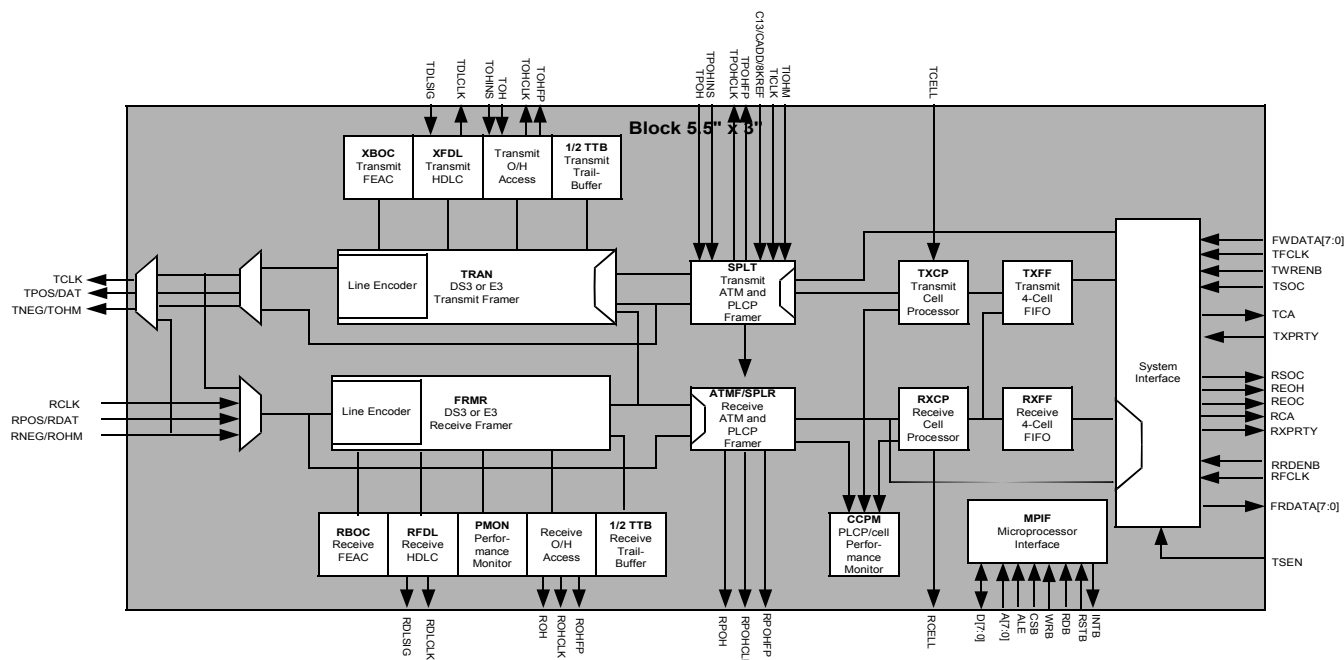
FEATURES

- ## FEATURES
- Monolithic single-chip ATM User-Network Interface (UNI) for DS3, E3, DS1, and E1 Plesiochronous Digital Hierarchy (PDH) applications.
 - Provides on-chip DS3 (M23 or C-bit parity) and E3 (G.751 and G.832) framers.
 - Implements the ATM direct cell mapping into DS1, DS3, E1, and E3 transmission systems according to ITU-T Recommendation G.804.
 - Implements the ATM physical layer for Broadband ISDN according to ITU-T Recommendation I.432.
 - Implements the Physical Layer Convergence Protocol (PLCP) for DS1 and DS3 transmission systems according to the ATM Forum User Network Interface Specification and ANSI TA-TSY-000773, TA-TSY-000772 and E1 and E3 transmission systems according to ETSI 300-269 and ETSI-270.
 - Provides UTOPIA L1-compliant ATM-PHY interface.
 - Supports DS3 FEAC code insertion/detection and provides an integral HDLC transceiver for path maintenance datalink processing.
 - Supports G.832 Trail Trace and provides an integral HDLC transceiver that supports the Network Requirement or General Purpose datalinks.
 - Provides detection of DS3/E3 Loss Of Frame (LOF) and yellow alarm.
 - Accumulates BIP-8, framing and FEBE events.
 - Provides ATM cell scrambling/descrambling, HCS error detection and correction, HCS insertion, idle/unassigned ATM cell filtering and insertion, and accumulates counts of transmitted and received cells.
 - Provides DS3/E3 diagnostic loopback, line loopback, payload loopback and ATM cell loopback.
 - Provides support for an arbitrary rate external transmission line interface up to a maximum rate of 52 Mbit/s.
 - Uses PMC-Sierra PM4341A T1XC T1, PM6341 E1XC E1, or PM4351 COMET framer/line interface devices for DS1, E1, and J1 ATM UNI applications.
 - Software-compatible with the PM4341A T1XC, PM6341 E1XC, PM4351 COMET, M5346 S/UNI[®] LITE, and PM7344 S/UNI-MPH.
 - Application-compatible with the PM8313 D3MX, PM4314 QDSX, and PM7323 RCMP-200.
 - Provides an 8-bit microprocessor interface for configuration, control, and status monitoring.
 - Low power CMOS technology.
 - Available in a high density 100-pin PQFP package (14 by 14 mm).
- ## APPLICATIONS
- ATM Switches
 - ATM Routers
 - ATM Network Interfaces
 - DSLAMs
 - ATM / SMDS Test Equipment

APPLICATIONS

- ATM Switches
- ATM Routers
- ATM Network Interfaces
- DSLAMs
- ATM / SMDS Test Equipment

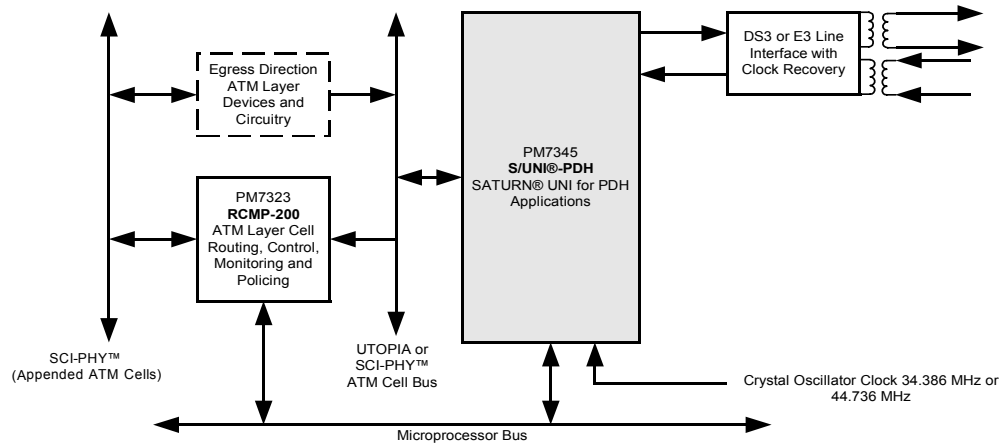
BLOCK DIAGRAM



SATURN User Network Interface for PDH Applications

TYPICAL APPLICATIONS

DS3 OR E3 ATM USER NETWORK INTERFACE



DS1 OR E1 ATM USER NETWORK INTERFACE

