PM7344

Summary Information



S/UNI-MPH SATURN UNI FOR MULTI-PHY T1/E1

FEATURES

- Monolithic single chip quad ATM Physical Layer User-Network Interface operating at 1.544 Mbit/s or 2.048 Mbit/s.
- Integrates a quad full-featured dualmode T1/E1 framer/transmitter for terminating four duplex 1.544 Mbit/s DS1 or four duplex 2.048 Mbit/s E1 signals. Recovers T1/E1 clock and data using a digital phase locked loop for high jitter tolerance.
- Implements the ATM Forum User Network Interface Specification V3.1 for DS1 and E1 transmission rates.
- Implements the ATM physical layer for Broadband ISDN according to ITU-T Recommendation I.432.
- Implements direct mapping into four T1 or E1 streams according to ITU-T Recommendation G.804.
- Provides Utopia L1 compliant, Utopia L2 compatible ATM-PHY interface with parity and multi-PHY control signals.
- Software compatible with the PM4341A T1XC, PM6341 E1XC, PM4351 COMET, PM5346 S/UNI-LITE and PM7345 S/UNI-PDH.
- Application compatible with the PM8313 D3MX, PM4314 QDSX, and PM7323 RCMP-200.
- Provides a generic 8-bit microprocessor bus interface for configuration, control, and status monitoring.
- Low power, +5V, CMOS technology
- 128 pin rectangular (14mm x 20mm) PQFP package.

APPLICATIONS

- ATM Switches Supporting DS1 or E1 UNI Ports
- ATM Switches Supporting DS3 or E3 Ports Carrying Multiplexed DS1 or E1 UNI Signals
- ATM Switches Supporting SONET/ SDH Ports Carrying Tributary Mapped DS1 or E1 UNI Signals
- ATM Customer Premise Equipment Supporting Multiple DS1 or E1 UNI Ports

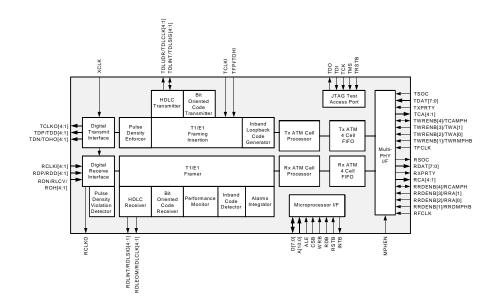
T1 FRAMER/TRANSMITTER

- Supports SF or ESF format signals using B8ZS or AMI line code .
- Provides loss of signal detection and red, yellow and AIS alarm detection.
 Supports transmission of Alarm Indication Signal (AIS) or yellow alarm signal in all formats.
- Detects violations of the ANSI T1.403 12.5% pulse density rule over a moving 192 bit window.
- Supports line and path performance monitoring according to ANSI specifications. Accumulators are provided for counting ESF CRC-6 errors, Framing bit errors, LCVs, and LOF or frame alignment events.
- Provides ESF bit-oriented code detection/generation, and an HDLC interface for terminating/generating the ESF data link.
- Extracts/inserts the data link in ESF mode.

E1 FRAMER/TRANSMITTER

- Supports G.704 2048 kbit/s format using HDB3 or AMI line code.
- Supports CRC multiframe alignment or the signalling multiframe alignment.
- Declares RED and AIS alarms using Q.516 recommended integration periods. Provides loss of signal detection, and indicates loss of frame alignment (OOF), loss of signalling and loss of CRC multiframe alignment.
- Supports line and path performance monitoring according to ITU-T recommendations. Accumulators are provided for counting CRC-4 errors, FEBE, Frame sync errors and LCVs.
- Supports reception and transmission of remote alarm and AIS.
- Provides an HDLC interface for terminating/generating a data link.
- Supports the timeslot 16 (64 kbit/s) datalink which may be used for common channel signalling, or any combination of the national bits.

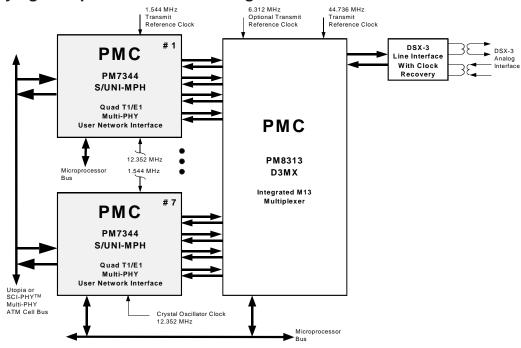
BLOCK DIAGRAM



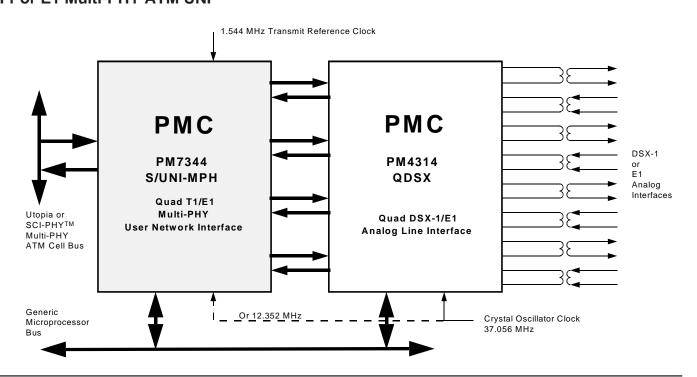
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TYPICAL APPLICATIONS:

DS3 Port Carrying Multiplexed T1 ATM UNI Signals



T1 or E1 Multi-PHY ATM UNI



Head Office: PMC-Sierra, Inc. Suite 105 - 8555 Baxter Place Burnaby, B.C. V5A 4V7 Canada

Tel: 604.415.6000 Fax: 604.415.6200 To order documentation, send email to: document@pmc-sierra.com or contact the head office, Attn:Document Coordinator

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