

PM4329 HDLIU 32

High Density T1/E1/J1 Line Interface Unit Device

Product Highlights

- Monolithic device that integrates 32 T1/J1/E1 shorthaul line interface circuits
- Software selectable between E1 and T1 mode, in groups of 16 links
- Links 1-16 and 17-32 can be configured for either T1 or E1 mode
- Meets or exceeds T1/J1 and E1 shorthaul network access specifications including ANSI T1.102, T1.403, T1.408, AT&T TR 62411, ITUT G.703, G.704 as well as ETSI 300- 011, CTR-4, CTR-12, and CTR-13
- Provides encoding and decoding of B8ZS, HDB3, and AMI line codes
- Provides per receiver, clock recovery, and line performance monitoring
- Provides transmit and receive jitter attenuation
- Provides support for redundancy
- Provides a digitally programmable Shorthaul pulse template per transmitter
- Provides a selectable, per channel independent de-jittered T1 or E1 recovered clock for system timing and redundancy
- Provides PRBS generators and detectors on each tributary for error testing at DS1 and E1 rates as recommended in ITU-T O.151

- Provides an 8-bit microprocessor bus interface for configuration, control, and status monitoring
- Provides line and digital loopback modes
- Supports programmable inband loopback codes
- Uses line rate system clock
- Provides an IEEE 1149.1 (JTAG) compliant test access port (TAP) and controller for boundary scan test

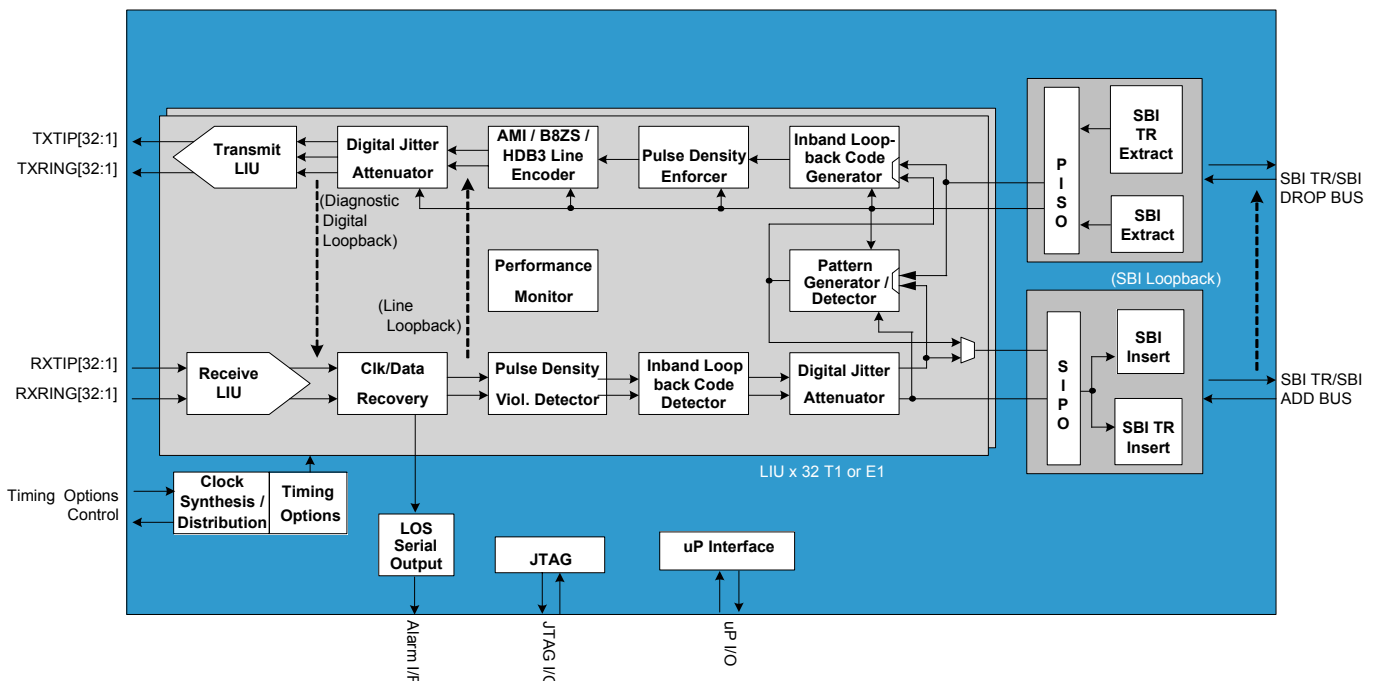
System Interface

- Supports the following system interfaces:
 - High-density SBI bus interface
 - High-density, low latency, SBI TR bus interface

Receive Section

- Supports T1 signal reception signal reception for distances with typically up to 24dB of cable attenuation using PIC 22 gauge cable
- Supports E1 signal reception signal reception for distances with typically up to 22dB of cable attenuation using PIC 22 gauge cable
- Performs B8ZS or AMI decoding when processing a bipolar DS-1 signal, and HDB3 or AMI decoding when processing a bipolar E1 signal

Block Diagram

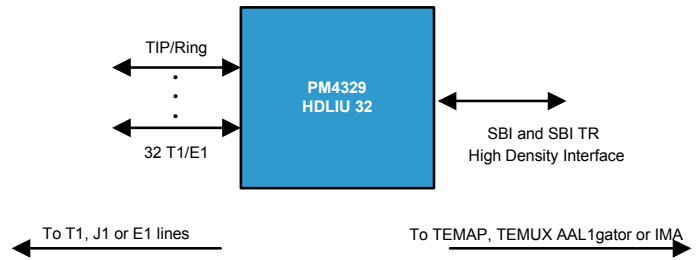


- Tolerates more than 0.4 UI peak to peak, high frequency jitter as required by AT&T TR 62411 and Bellcore TRTSY- 000170
- Detects line code violations, B8Z5/HDB3 line code signatures, loss of signal, and successive zeroes conditions

Power and Package

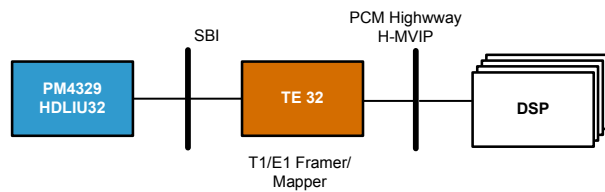
- Implemented in a low power 3.3 V tolerant 1.8/3.3 V CMOS technology
- Available in a high density 276-pin L2BGA (27 mm x 27 mm) package
- Provides a -40 °C to +85 °C industrial temperature operating range

HDLIU 32 Interfaces

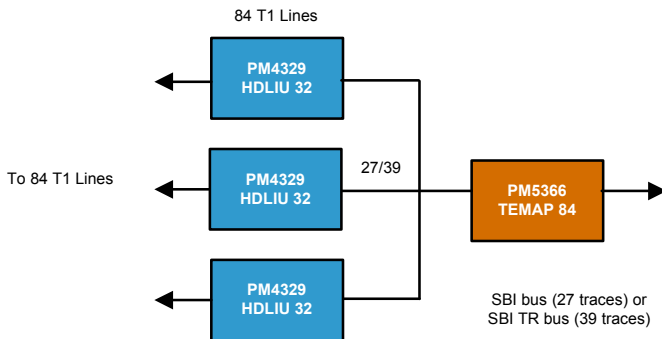


Typical Applications

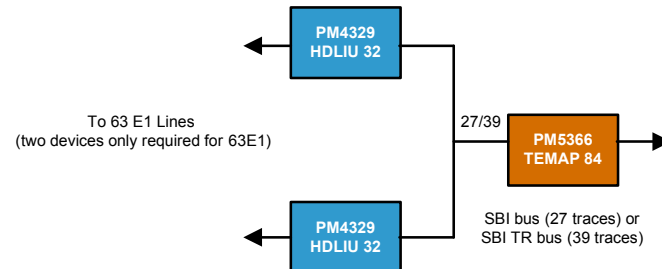
Voice Gateway



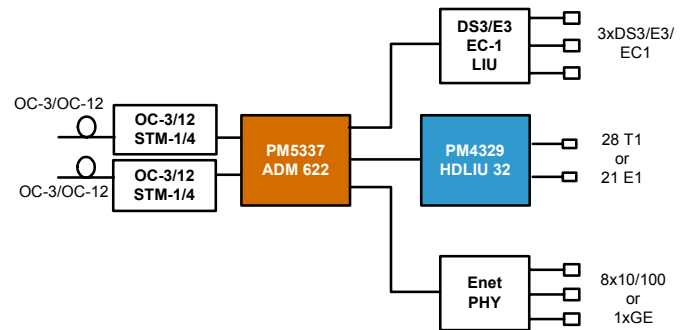
84 T1 Lines



63 E1 Lines



Integrated Add/Drop Multiplexer for 155/622 Mbit/s



Corporate Head Office:
 PMC-Sierra, Inc.
 Mission Towers One
 3975 Freedom Circle
 Santa Clara, CA, 95054, U.S.A.
 Tel: 1.408.239.8000
 Fax: 1.408. 492.1157

Operations Head Office:
 PMC-Sierra, Inc.
 100-2700 Production Way
 Burnaby, BC V5A 4X1 Canada
 Tel: 1.604.415.6000
 Fax: 1.604.415.6200



Enabling connectivity. Empowering people.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Telecom Interface ICs](#) category:

Click to view products by [Microchip](#) manufacturer:

Other Similar products are found below :

[MT8888CP1](#) [MT88E45BS1](#) [MT9174AN1](#) [MT88E39ASR1](#) [MT9074AL1](#) [MT9122AP1](#) [PEB4266TV12 S LL62](#) [DS3150TNC1+](#)
[DS26334GN+](#) [MT88E46AS1](#) [MT8963AE1](#) [DS26324GNA3+](#) [PM4351-RI](#) [PEF41068FV11 S LL8T](#) [PEF41068VV12 S LL8U](#)
[LE58QL022BVC](#) [LE58QL022BVCT](#) [LE88286DLC](#) [LE88276DLCT](#) [LE79252BTC](#) [RTL8019AS](#) [W7100A-S2E-100LQFP](#) [M100EVO-LITE](#)
[HE910NAR206T701](#) [XRT86VL38IB](#) [CMX631AD4](#) [XD8870](#) [82V2084PFG](#) [CPC5620A](#) [CPC5620ATR](#) [CPC5621A](#) [CPC5621ATR](#)
[CPC5622A](#) [CPC5622ATR](#) [DS21455+](#) [DS21348G+](#) [DS2148TN+](#) [CMX673E3](#) [LE88506DVC](#) [MT88E39AS1](#) [LE89810BSCT](#) [LE89810BSC](#)
[CMX673D4](#) [CMX683D4](#) [CMX602BD4](#) [MT8967AS1](#) [HC55185AIMZ](#) [MT8952BP1](#) [DS3150QN+](#) [DS2149Q+](#)