PM8318 TEMAP 168

## High Density T1/E1 Framer with Integrated VT/TU Mappers and M13 Muxes

FEATURES

The PM8318 TEMAP 168 is a high density T1/E1 framer with integrated VT/TU mappers and M13 multiplexers. This feature-rich device is ideally suited for applications performing high-density transport or termination of channelized DS3 or unchannelized DS3, E3, T1, or E1 over existing SONET/SDH facilities.

- Processes 168 T1s/126 E1s or half of an STS-12/STM-4.
- Integrates SONET/SDH and DS3/E3 functionality as well as 168 T1/126 E1 bidirectional PMON-capable transceivers.
  - SONET/SDH functions include high order path processing, low order path processing, T1/E1 to VT/TU mapping, and DS3/E3 to AU-3/TU-3 mapping.
  - DS3/E3 functions include six DS3/E3 bidirectional PMON-capable transceivers and six M13 multiplexers.
- Line side interfaces include:
  - A 77.76 MHz byte wide parallel TelecomBus supporting an STS-12/STM-4.
  - Two Working and two Protect 622 MHz serial TelecomBus interfaces supporting a full STS-12/STM-4 of traffic.
  - Six serial DS3/E3/EC-1 links.
- System side interface is a 19.44 MHz or 77.76 MHz byte serial SBI TR bus used to connect T1/E1 line interface units.
- Provides an input and output STS-1 level cross-connect to:
  - Groom incoming and outgoing data streams; or

- Connect two TEMAP 168 devices in parallel to process a full STS-12/STM-4 of bandwidth.
- Provides a serial interface for extracting and inserting the low order path and the high order path.
- Supports bit asynchronous mapping of T1/E1 tributaries into SONET/SDH.
- Generates and terminates Low Order Path overhead (V5, J2, Z6, Z7 bytes).
- Provides Full Duplex performance monitoring for T1, E1, DS3, and E3 tributaries provided for add and drop directions.
- Supports inband error reporting by updating the REI, RDI, and auxiliary RDI bits in the V5 byte (G1 byte for TU-3) with the status of the received tributary.
- Supports M13 and C-bit parity DS3 formats.
- Provides High Order Path overhead (J1, B3, C2, G1 bytes) processing and the corresponding errors and indications.
- Each T1 transceiver can be independently configured to support the common DS1 signal formats (with full SF/ESF support or partial SLC®96 support) or bypassed (unframed mode).
- Provides in-line DS3/E3 and T1/E1 framers and transmitters for each data path allowing true bi-directional performance monitoring of each path.
- Each T1 transceiver:
  - Detects the presence of Yellow and AIS patterns.
  - Integrates Yellow, Red, and AIS alarms.

BLOCK DIAGRAM

PMC-SIERRA
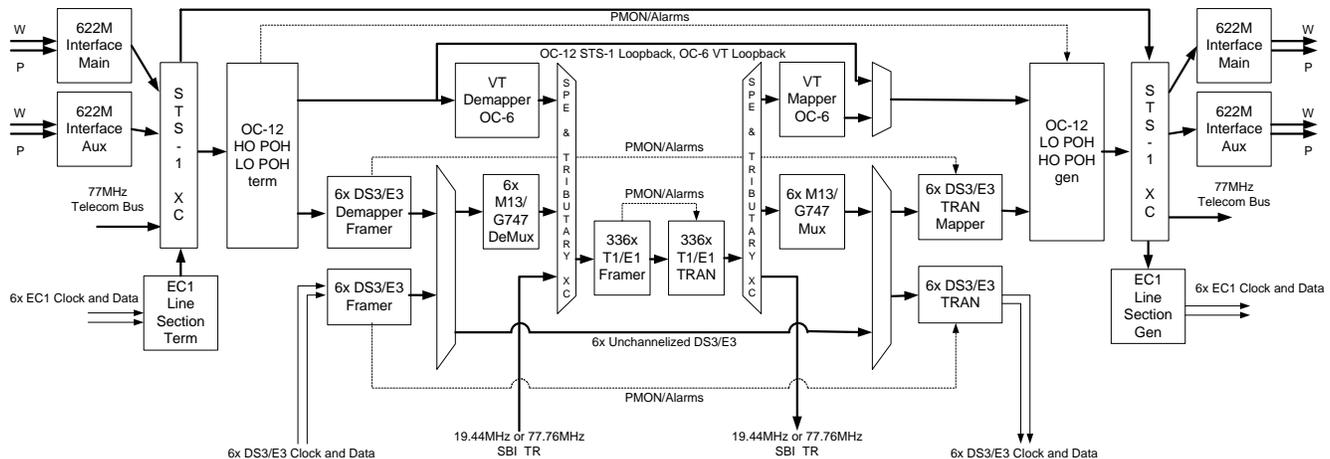
- Supports ingress performance monitoring, ESF bit-oriented codes, HDLC messages on the ESF data link, inband loopback codes, and PRBS generation/detection.
- Each E1 transceiver:
  - Detects the presence of remote alarm and AIS patterns.
  - Supports ingress performance monitoring, support for HDLC messages in the National Use bits, Sa-bit codewords, and V5.2 link ID detection.
  - Contains desynchronizers and jitter attenuators (JATs) that provide Jitter and Wander compliant E1, T1, DS3, and E3 physical interfaces without the need for external jitter attenuators.

- Provides an input and output T1/E1 tributary cross-connect to allow switching of tributaries between the VT/TU mapper, M13 multiplexer and SBI TR bus.
- Integrates Red and AIS alarms.

APPLICATIONS

- High Density T1/E1/DS3/EC1 line cards.
- Ported or Portless TransMux cards.
- Integrated Test Access on Fabric cards.

TYPICAL APPLICATIONS

T1/E1 LINE CARD

Additional device capacity can be used for other applications such as transmux

622 Mbit/s Backplane Interfaces
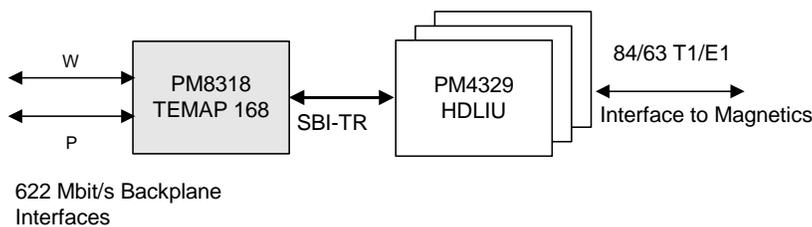
12-PORT DS3/E3/EC-1/TRANSMUX LINE CARD
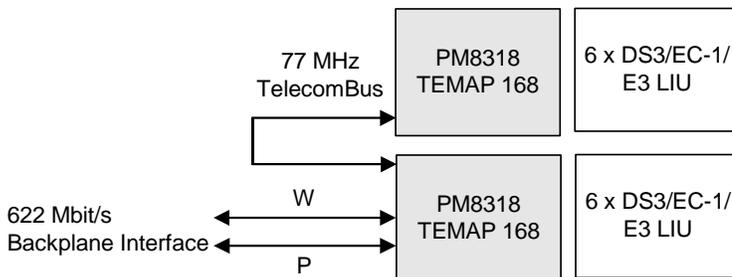
PORTLESS TRANSMUX WITH TBS 2488

Interworks 672 Full Duplex of T1 Channels between Channelized DS3 and SONET VT (1.25G/STS-24 Bi-directional Portless Transmux)

DS3 ports can be accessed on this card if electrical access is required.

Easily scales to higher capacities
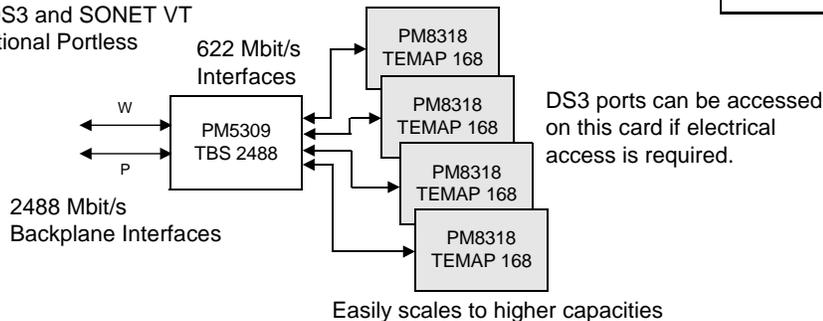
INTEGRATED TEST ACCESS

Add Integrated Test Access to Fabric Card for T1/E1/DS3 performance monitoring capabilities

VT/TU Server Card

OR

STS-1 Server Card

PMC
PMC-SIERRA
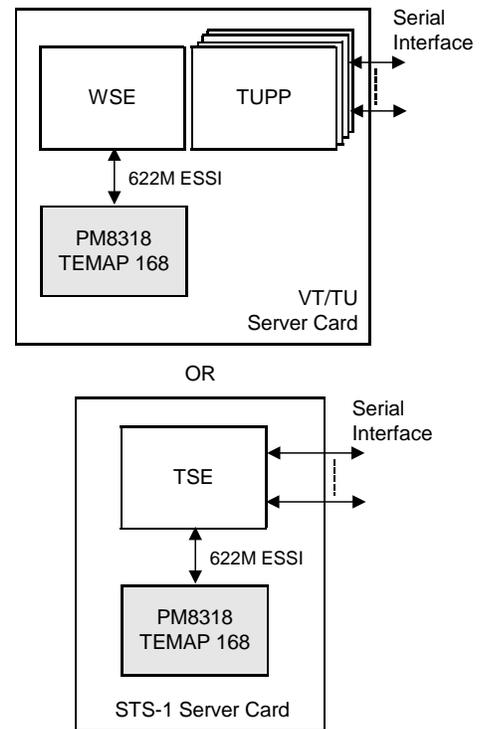
X-ON Electronics

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   82P2284BBG   82V2084PFG   CPC5620A   CPC5620ATR   CPC5621A   CPC5621ATR   CPC5622A   CPC5622ATR   DS21455+   DS21348G+   DS2148TN+   CMX673E3   LE88506DVC   MT88E39AS1   LE89810BSCT   LE89810BSC   CMX673D4   CMX683D4   CMX602BD4   MT8967AS1   HC55185AIMZ   MT8952BP1   DS3150QN+