

High Density 84/63 Channel VT/TU Mapper and M13 Multiplexer

FEATURES

The PM5366 TEMAP-84 is a 155 Mbit/s multi-channel VT/TU Mapper with ingress or egress performance monitoring integrated with three M13 Multiplexers.

This monolithic device integrates:

- Three SONET/SDH VT1.5/VT2/TU11/TU12 bit asynchronous or byte synchronous mappers.
- Three full featured M13 multiplexers with DS3 framers.
- Three SONET/SDH DS3 mappers.
- Line side and system side interface support:
 - Provides a 19.44 MHz or 77.76 MHz SONET/SDH Add/Drop Telecom bus interface for seamless connection with PMC-Sierra's SONET/SDH devices.
 - Supports a byte serial Scaleable Bandwidth Interconnect (SBI) bus

interface at either 19.44 MHz or 77.76 MHz for high density system side device interconnection to PMC's PM4318 OCTLIU and link layer products.

- Support for transparent virtual tributaries when SBI is used with SONET/SDH mapper.
- Provides jitter attenuation in the T1/E1 tributary receive and transmit directions.
- Provides three independent de-jittered T1 or E1 recovered clocks for system timing and redundancy.
- Provides per link diagnostic and line loopbacks.
- Provides PRBS generators and detectors at DS3 and E3 rates and on each tributary for error testing at T1 and E1 rates as recommended in ITU-T 0.151, 0.152.
- Feature-rich functional software drivers available with device.

- Provides a generic 8-bit microprocessor bus interface for configuration, control and status monitoring.
- Provides a standard five-signal P1149.1 JTAG test port for boundary scan board test purposes.

VOLTAGE

- Low power 1.8 V/3.3 V CMOS technology. All pins are 5 V tolerant.

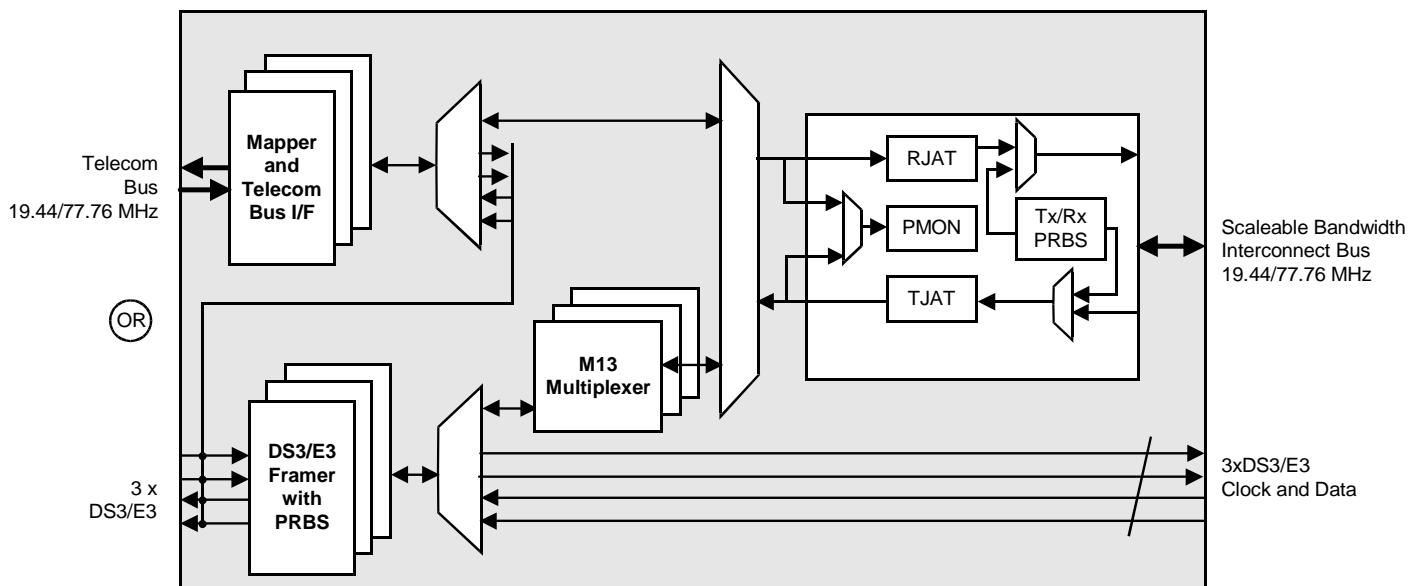
PACKAGE

- 324-fine pitch PBGA package (23mm x 23mm).
- Supports industrial temperature range (-40 °C to 85 °C) operation.

APPLICATIONS

- Metro Optical SONET/SDH Add/Drop and Terminal Multiplexers.
- Multi-Service Switches.
- Unchannelized DS3 Frame Relay and ATM Interfaces.

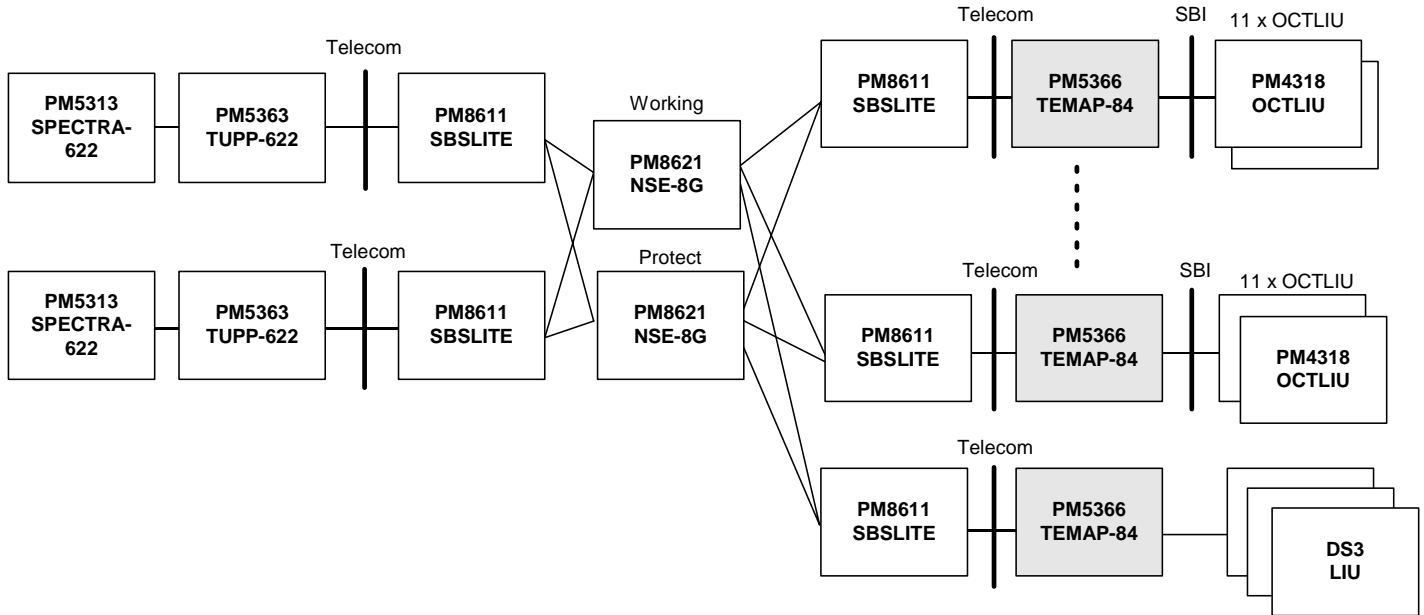
BLOCK DIAGRAM



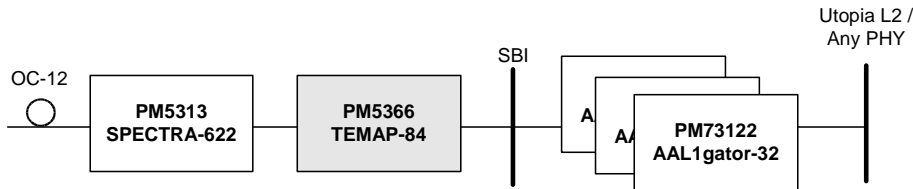
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TYPICAL APPLICATIONS

ADD/DROP MULTIPLEXER (ADM) WITH VT CROSS CONNECT



UNSTRUCTURED CIRCUIT EMULATION (VT MAPPED)



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