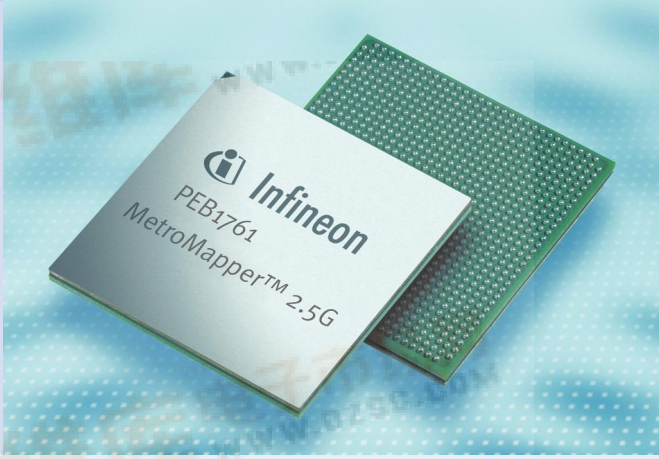
Preliminary Product Brief



MetroMapper™ 2.5G

Multi-Service Framer for STS-48/ STM-16, STS-12/STM-4

The MetroMapper™ 2.5G is a multi-service framer capable of mapping datacom traffic into SONET/SDH transport payloads. On the line side, the MetroMapper™ 2.5G supports protected STS-48/STM-16 and STS-12/ STM-4 interfaces. On the client side, one OIF SPI-3 with up to 128 logical channels are provided. Data from the SPI-3 interface is encapsulated by either the GFP-F, LAPS (X.85/.86) or PPP mapping scheme. Low-order and high-order virtual concatenation (VCAT) with Link Capacity Adjustment Schemes (LCAS) for up to 128 virtual concatenated channels is supported. MetroMapper™ 2.5G provides Ethernet VLAN ID processing and enables MPLS label update processing.

Applications

- Access / edge aggregation
- MSPP
- Switches and Routers

Features

Framer

- Multi-Rate SONET/SDH framer with STS/AU and VT/TU pointer processing capabilities
- Processes a single STS-48/STM-16 or a quad STS-12/STM-4, STS-3/STM-1
- Payload Pointer interpretation and generation
- Provides full performance monitoring for high- and low-order paths
- Provides high-order and low-order virtual concatenation according to ITU-T G.707
- Supports up to 128 virtual concatenated groups (VCG)
- Flexible concatenation of up to 48 high-order paths and up to 64 low-order paths into any virtual concatenation group
- Supports up to 1344 VT1.5/TU-11 or 1008 VT2/TU-12 low-order paths
- Provides following mapping schemes:
  - AU-4 / VC-4 / TUG-3
  - AU-4 / VC-4 / TUG-3 / TUG-2
  - AU-3 / VC-3 or STS-1 / STS-SPE
- External buffer for up to 64 ms differential delay compensation
- Different VCG group types are defined:
  - N × VC-12, N × VC-11, N × VT1.5 SPE, N × VT2 SPE (N ≤ 64)
  - N × VC-3, N × STS1 SPE (N ≤ 48)
  - N × VC-4, N × STS3c SPE (N ≤ 16)
- Fully integrated support for the Link Capacity Adjustment Scheme (LCAS) protocol according to ITU-T G. 7042
- Supports 1+1 line protection
- TOH/POH add/drop interface
- Fully SONET/SDH compliant

Encapsulation/Decapsulation

- Provides GFP-F mapping according to T1X1.5/ ITU-T G. 7041
- PPP processing according to IETF RFC 1662
- LAPS processing according to ITU-T X.85 + X.86
- 128 logical channels, can be independently configured
- PPP protocol support: MPLS Unicast & IP Version 4/6
- LAPS protocol support: Ethernet and IP Version 4/6
- GFP Client management frame insertion/detection

SPI-3 Interface

- 128 logical channels running in 32 bit mode
- Packet mode with variable block length
- Interleaved channel mode

Ethernet

- Enables Ethernet via VLAN tagging
  - VLAN update including tag, retag and change of VLAN IDs
  - performs 512-4096 entry (port, VLAN) lookup
  - supports VLAN double tagging

Diagnostics

- Various loop back modes for system debugging implemented

Interfaces

- Source synchronous STS-48/STM-16 or quad STS-12/STM-4 interfaces for working and protected links operating at 622 MHz LVDS or 78 MHz LVTTL
- TOH/POH add/drop interface
- OIF compliant SPI-3 interface
- Memory Interface including two DDR-SRAM and optionally 1 ZBT SRAM interface for L2 update function
- 66 MHz CPU interface
- IEEE 1149.1 JTAG boundary scan interface

Documentation

- Data Sheet
- Hardware Evaluation System
- **WINEASY** Software for MS Windows with graphical user interface

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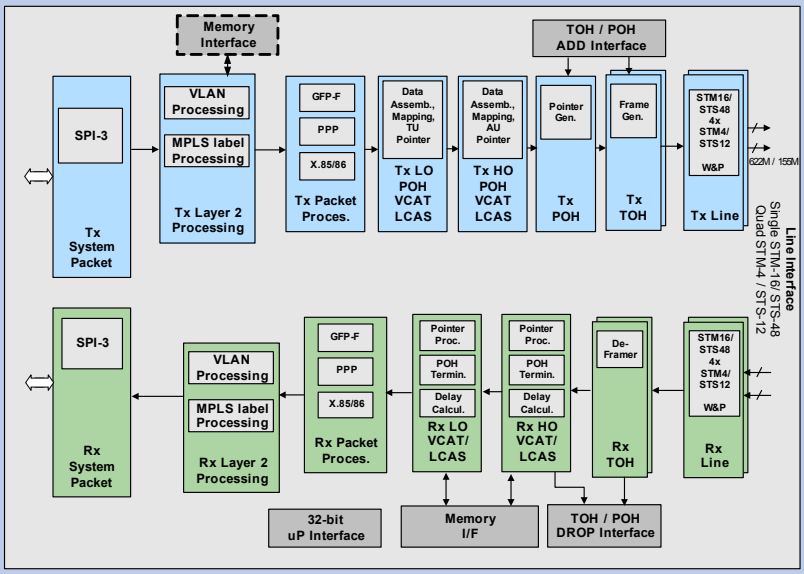
Optical Networking

Infineon technologies

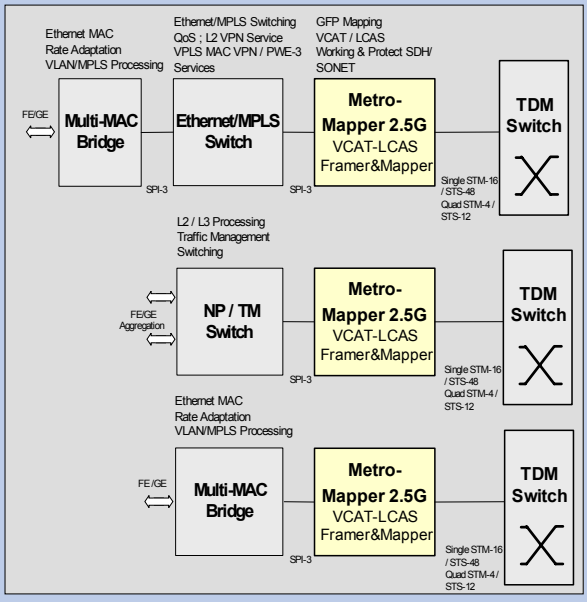
Block Diagram



Product Summary

Type	Sales Code	Package
MetroMapper™ 2.5G	PEB1761	1020 FineLine BGA (33 × 33 mm)

Application Example



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