

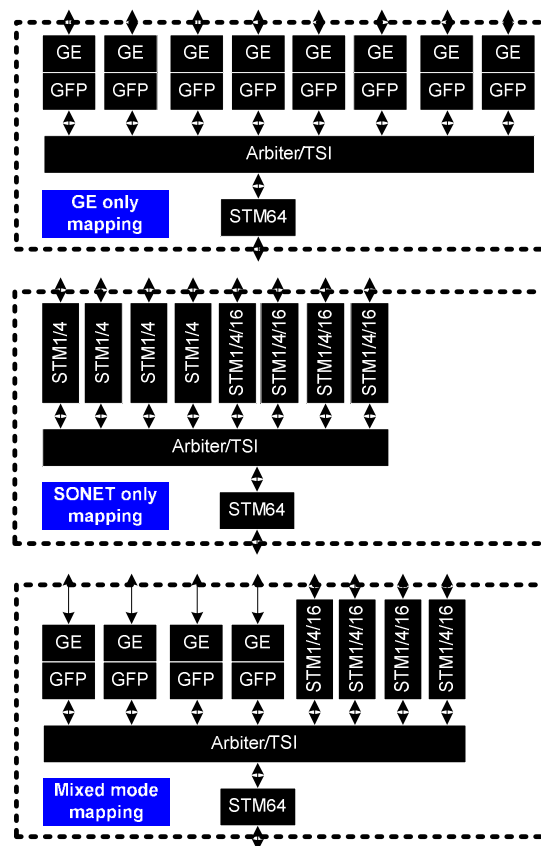


The MuxPonderSTM64 IP provides an SOC high capacity transport solution fit for metropolitan and long haul applications over SONET networks. Versatile and FPGA proved, the SOC IP aggregates GE and STM1/4/16 client signals at full line rate into an STM64 line interface. The IP can be configured as a GE only MuxPonder, a Multi-rate STM1/4/16 MuxPonder, or as a mixed mode GE/SONET MuxPonder.

### Features

- Eight Client network interfaces configurable as stm1/4/16 and/or GE for a maximum of 10Gbps
- STM64 concatenated line side mapping
- GFP-F framing of GE client signals
- Line and section termination of SONET client and line signals
- Transparent pass through path overhead for end to end SONET clients
- In-band end to end management communications via DCC channels between MuxPonders
- APS ready
- Performance and alarm monitoring and generation
- Redundant FE connections for backplane management applications
- Optical and signal performance monitoring
- Integrated CPU for management
- Serial port interface to management station

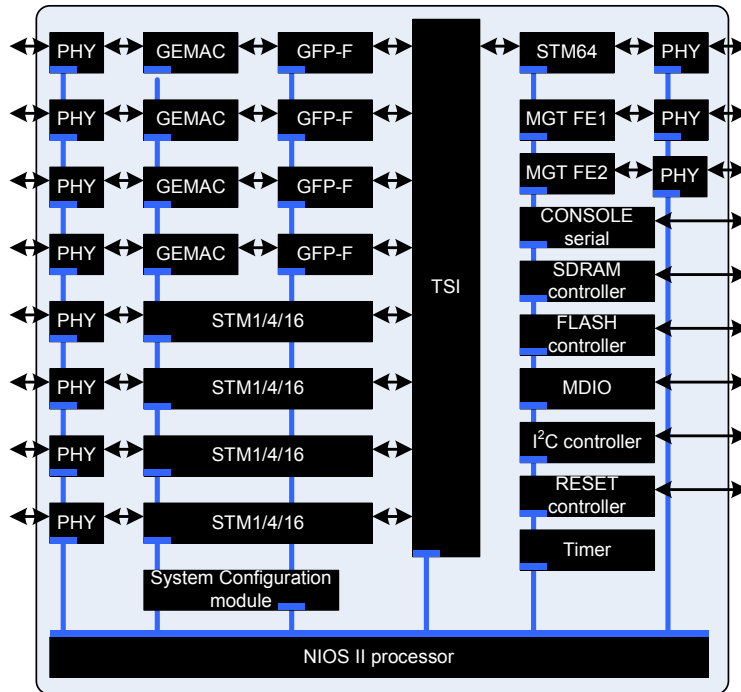
### Signal mappings



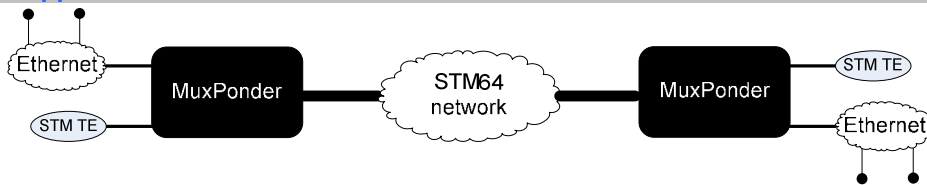
### Applications

- Enables leased line service through creating a transport link end to end
- Enables interconnections between different access network terminating equipment such as WIMAX, DSLAM, CABLE and PON OLT
- Interconnecting switches and routers over a geographically distributed client networks

## SOC mixed mode Block Diagram



## Network Application



## Client and Line Side Optical Interfaces

Client Type	4 SFP (1000BaseX), 4 SFP STM1/4/16
Line Type	1 XFP/SFP+ STM64 port
Line Aggregation Options	GE/SDH/SONET STM1/4/16
Signal Encapsulation	Generic Framing Procedure (GFP-F)
Transmission Testing	Loopback on client and line interfaces

## Performance Monitoring

Monitoring intervals	15 minutes / 24 hours
Physical Layer	SFP Optical Power, SFP Laser Bias Current, SFP Supply Voltage and Temperature
Ethernet	SNMP MIB, RFC 2665, RFC 2819 MIB and MIBII
SONET	B1, B2, LOS, LOF, SEF, AIS-1, AIS-P, REI-1, RDI-1, LOP-P, P-BIP