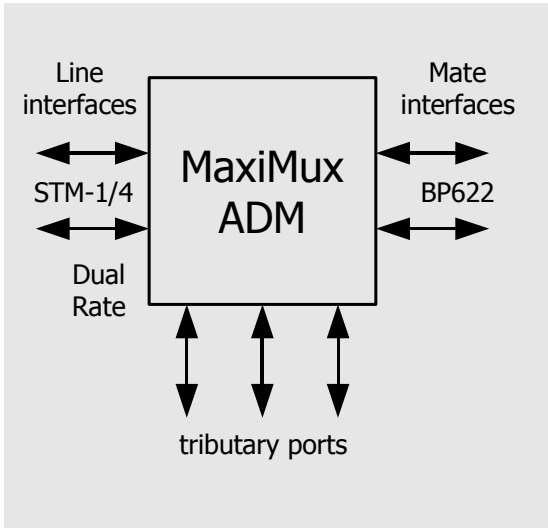


## MaxiMux – System-on-chip STM-4 ADM

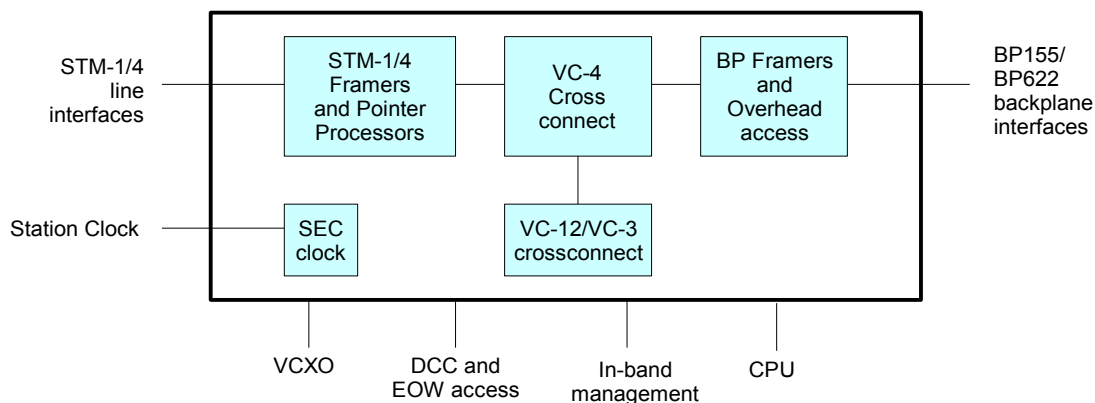


- **System on chip solution for STM-4 Add/Drop multiplexers or STM-1/4 tributary cards**
- **Integrated lower order cross connect, internal timing and clock functions, 12 line ports and 12 expansion ports**
- **Applications:**
  - **Micro ADM**
  - **Core device on STM-4 ADM system**
  - **Multirate STM-1/4 tributary card**

### Features:

- **Line Interfaces:**
  - 2 STM-1/4 dual rate interfaces
  - 10 STM-1 interfaces
  - Glueless interface to STM-1/4 multirate optical or electrical SFP modules
- **Backplane interfaces:**
  - 10 BP622 and 2 BP155 interfaces for tributary or mate card interfaces
- RS and MS overhead byte processing functions
- Integrated clock data recovery and scrambling on STM-1 interfaces
- Crossconnects: 81x78 VC-4, 1008x1008 VC-12, 48x48 VC-3
- Pointer processing, overhead termination and protection schemes on VC-12, VC-3 and VC-4
- Contiguous concatenation for VC-4-4c
- Path monitoring to support SNCP protection and fault management
- AIS, Unequipped and PRBS generators and monitors
- G.813 SEC Stratum-3 network element timing
- Dedicated external timing interface with 2 MHz and 2 Mbit/s modes
- Access to DCC and User byte channels
- Access to backplane overhead bytes
- HDLC based in-band management channels over VC12
- Performance monitoring
- Fault management
- Loopbacks
- 32 bit controller interface

MaxiMux blockdiagram



## Features and benefits:

### Feature

Multi-rate line interfaces  
 CDR on all STM-N interfaces  
 Integrated CDR  
 Integrated G.813 SEC network clock  
 Integrated clock generation and distribution  
 Non blocking cross connects  
 Optimized interface between mate devices

### Benefit

Optimal for flexible STM-1 or STM-4 line selection  
 No need for external clock data recovery or (de)mux device  
 Direct connection to SFP modules  
 Low device overhead  
 No need for external clock devices  
 Flexible grooming and protection switching of traffic  
 Straightforward design of protected ADM core cards

## Applications:

- Metro Add/Drop Multiplexer or MSPP with multiple STM-1/4 ring closures
- Line card: dual STM-1/4 ports with mate and tributary interfaces
- Tributary card: 10 port STM-1/4 dual-rate SDH card with redundant backplane interfaces

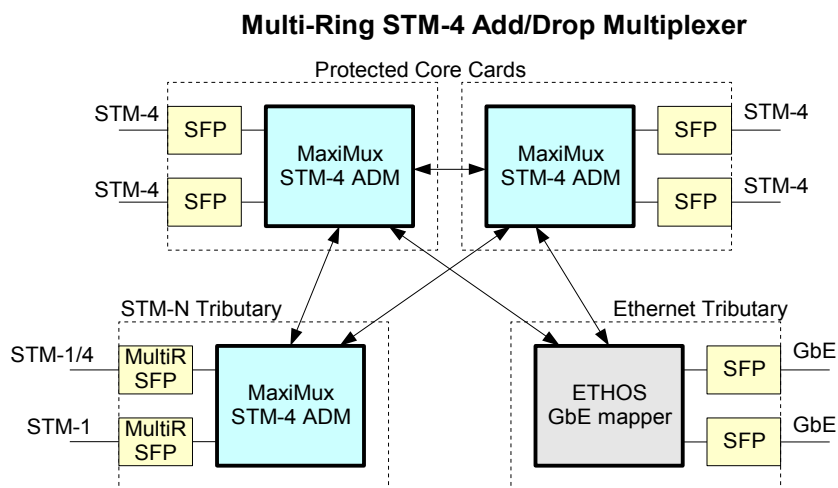


Figure 1. MaxiMux applications