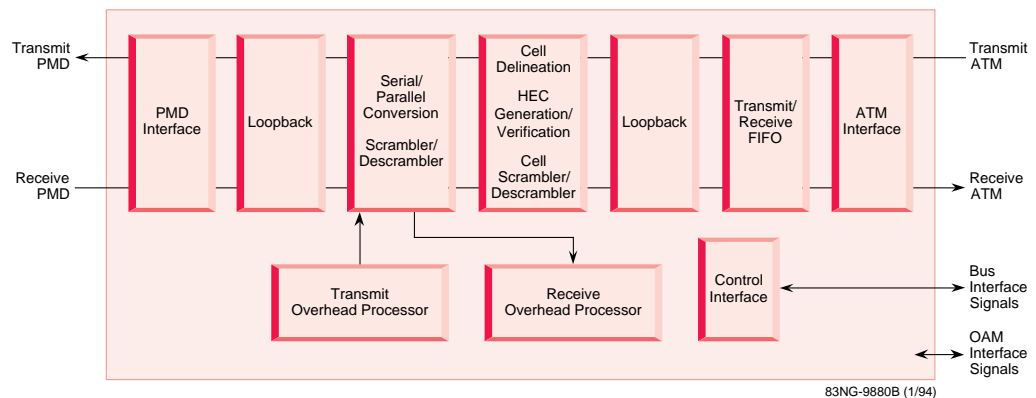


## μPD98402 ATM/SONET (STS-3C) FRAMER

The μPD98402 implements the asynchronous transfer mode (ATM) transmission convergence (TC) sublayer function in conformance with the ATM Forum specifications. This device allows for the transporting of ATM cells over SONET/SDH networks at the STS-3c/STM-1 rate of 155.52 Mbps.

### BLOCK DIAGRAM



### FEATURES

- All functionality required to insert and extract 53-byte ATM cells into and out of SONET frames
- HEC generation, verification, and correction
- Receive/transmit FIFOs for cells buffering
- Scrambling and descrambling, pointer processing, and frequency justification for SONET frames
- Framing of incoming traffic bytes
- Performance monitoring of interleaved parity bits and path status bytes
- Insert/drop registers (SOH: C1#1 to #3, F1, K2) (POH: F2, C2) for writing/reading of SONET overhead data
- Standard operation and maintenance (OAM) function to monitor network performance and provide alarm indication

### ATM LAYER INTERFACE

- UTOPIA interface
- Generic 8-bit microprocessor bus interface for configuration, control, and monitoring

### MEDIA INTERFACE

- Differential PECL signals for direct interface to an optical driver/receiver module
- Serial data rate of 155.52 Mbps and parallel (byte-wide) data rate of 19.44 Mbps

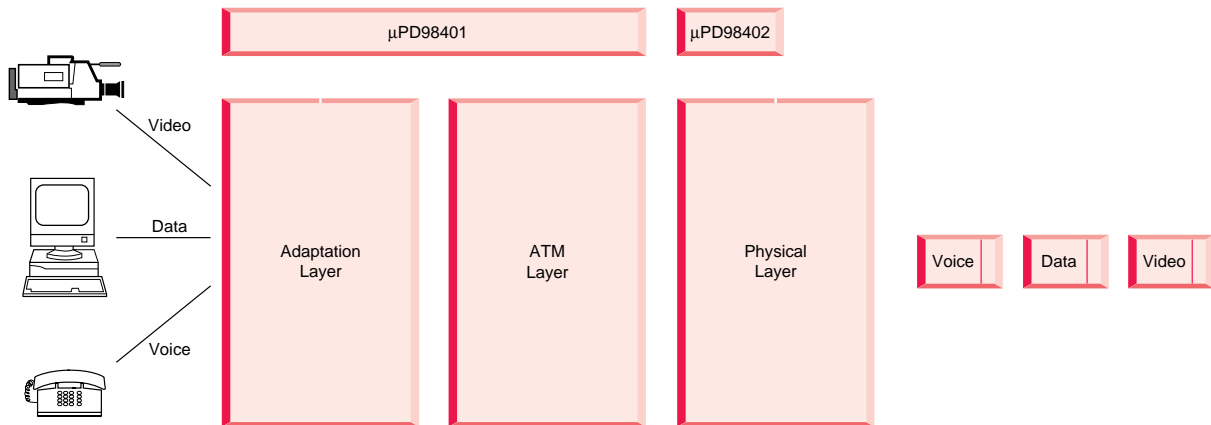
### GENERAL

- Internal loopback at the media side and ATM layer side
- Access pins for self-testing
- Low-power CMOS technology (0.8-micron)
- 160-pin PQFP package

### APPLICATIONS

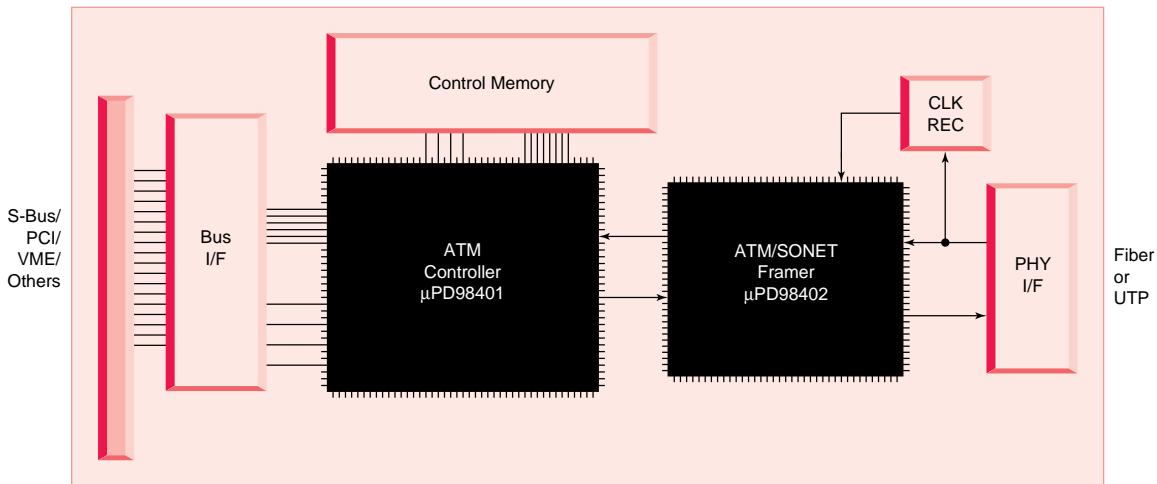
- ATM adapter cards
- Internetworking devices (bridges and routers)
- Workstations and servers
- ATM switches and hubs
- ATM test equipment

## ATM SYSTEM ARCHITECTURE



98YL-0168B (6/98)

## TYPICAL ATM NETWORK INTERFACE CARD (ATM-NIC)



98YL-0169B (6/98)



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