



The MT90503 is a multi-channel ATM Adaptation Layer 1 (AAL1) segmentation and reassembly (SAR) device that interfaces serial stream voice and data traffic from the TDM bus to the ATM network. The device provides the industry's highest integration—SONET 155Mbps or SDH OC3 bandwidth in a single-chip—substantially reducing cost, board space and power consumption compared to alternative solutions.

At a Glance

- ➔ Evaluation Kit: \$6000
- ➔ Package: 503-pin EPBGA
- ➔ Availability: Shipping now

Applications

- ➔ ATM Edge Switches
- ➔ Multi-service switches
- ➔ Carrier-Class Gateways
- ➔ Multi-service Access Equipment

Complementary Products

- ➔ MT90220/1 IMA
- ➔ MT9045 Digital PLL
- ➔ MT9072 T1/E1/J1 Octal Framer

Highest Integration

- ➔ 2048 bi-directional VC (Virtual Channel) connections.
- ➔ TDM upstream supports up to 32 serial streams at up to 8Mbit/s.
- ➔ ATM interface data rates up to 622Mbit/s.

Ease of Use

- ➔ Standard interface capability (H.100, H.110, MVIP).
- ➔ Three UTOPIA ports (2 at UPTOPIA level 2 at 52 MHz; 1 at UTOPIA level 1 at 25 MHz).
- ➔ Flexible aggregation capabilities, Nx64Kbps, for any combination of CES service for 64kbps.
- ➔ Programmable to minimize processing delay to less than 125us from TDM to ATM, and less than CDV+250us ATM to TDM.

Standards Compatible

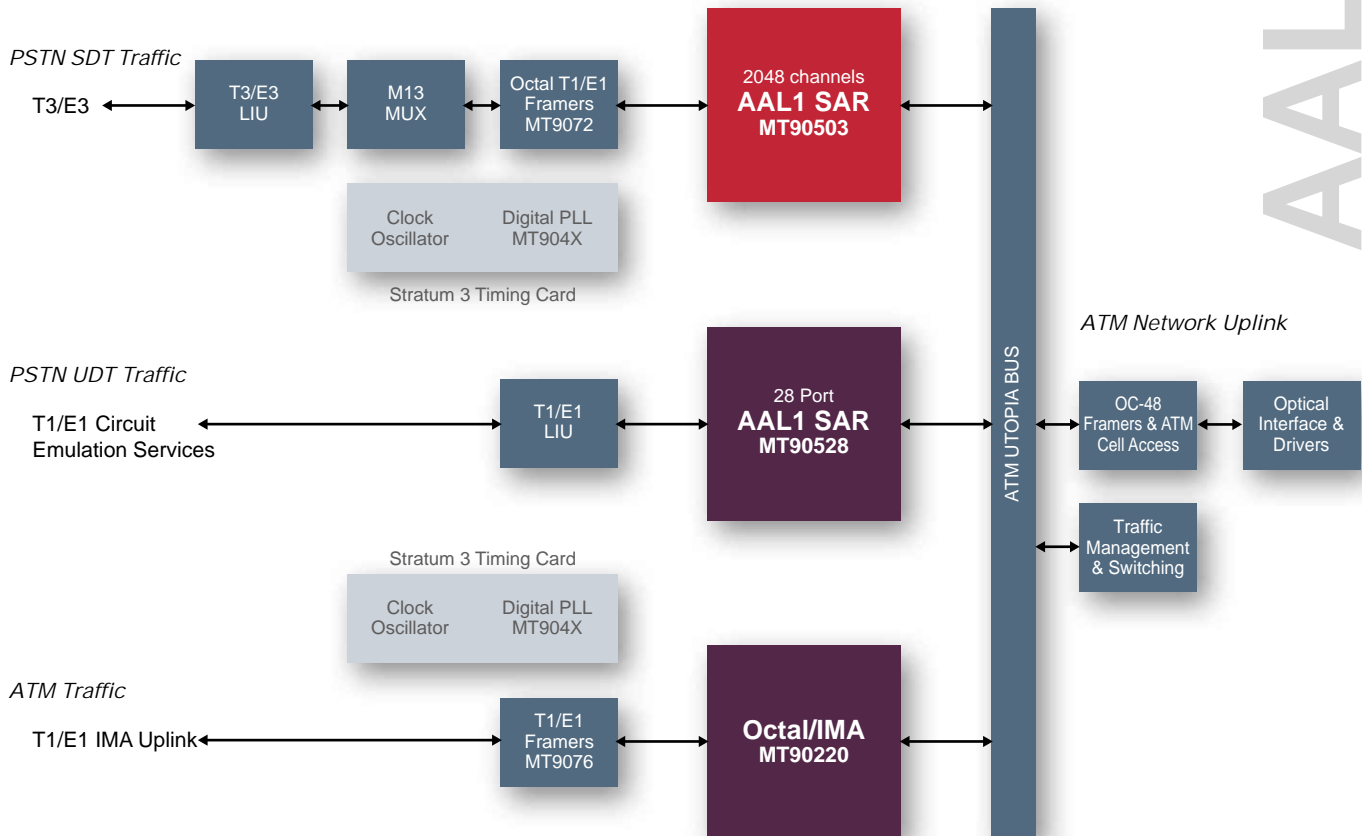
- ➔ VTOA-0078 ATM Forum Specification Circuit Emulation Service Interoperability Specification (CES-IS).
- ➔ H.100, H.110, MVIP telecommunication bus standards.

Customer Support

The MT90503 evaluation kit includes a board, device driver and demo software, API software, reference design for SONET 155Mbps, and handsets for VoATM demo.

Applications

The following diagram illustrates an ATM edge switch implementation that offers a range of high-bandwidth interfaces providing ATM network access to various types of Voice and Data traffic. The combination of Zarlink's SARs, IMA, framers and Digital PLL ICs provide a system-level solution that increases capacity, minimizes delay of time-sensitive voice traffic, and optimizes synchronization between the TDM and ATM networks.



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