

CoV5.2

ETSI V5.2 Protocol Stack and Testbed for building & testing Local Exchange and Access Devices

Product overview

CoV5.2 is a modular 'C' language implementation of ETSI V5.2 universal signaling requirements for Access Network (AN) and Local Exchange (LE) devices. CoV5.2 provides management support for the following V5.2/V5.1 access types:

- Analog (PSTN), ISDN BRI, and ISDN PRI access
- Analog or digital accesses for semi-permanent connections without associated out-band signaling information, with flexible bearer channel allocation on a per-call basis.

CoV5.2 is comprised of customizable applications (Link Manager, PSTN, Digital Section, and Qx), Layer 3 management protocol multiplexors, distributed Layer 2 multiplexed envelope functions, and Layer 1 support for popular processors and framers.

Layer 3 includes five distinct protocol multiplexors, a finite state machine (FSM), and an interface to a supervisory agent.

The *PSTN Protocol Multiplexor* agent is a stimulus entity that transfers information about an analog line over the V5.2 interface. Functions include path set-up, path release, and transfer of line signal data to a corresponding agent on the remote side.

The *Control Protocol Multiplexor* consists of a Common Control Protocol sub-agent and a Port Control Protocol sub-agent. These monitor and maintain the status of ISDN ports and subscribers.

The *Protection Protocol Multiplexor* agent provides fault-tolerant path protection switching of primary and secondary links in the event of a failure, without loss of signaling information.

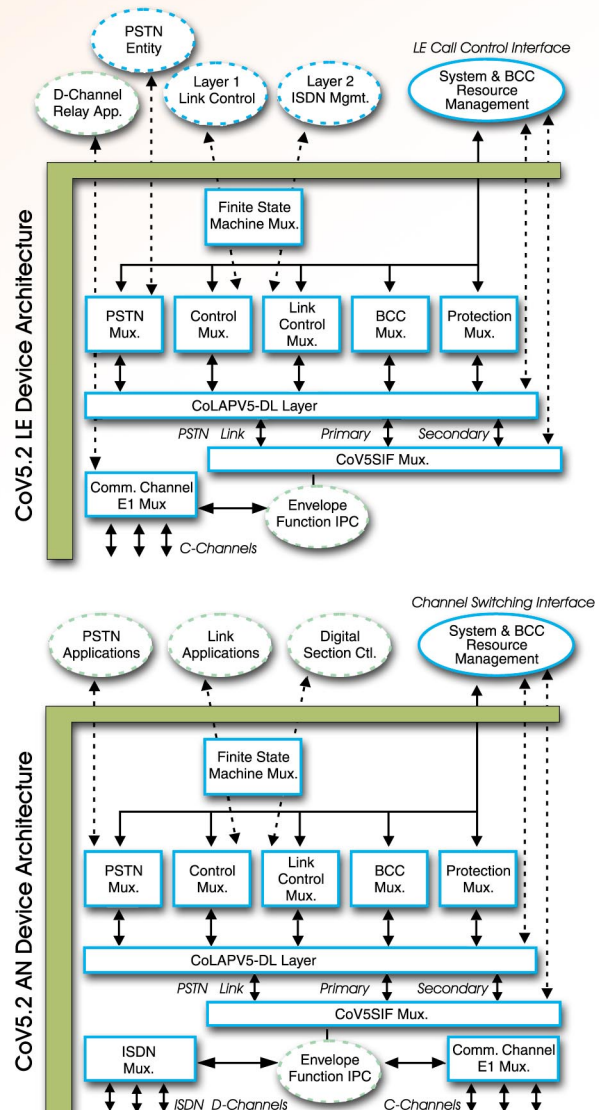
The *Link Control Protocol Multiplexor* agent coordinates multiple physical E1 links within a V5.2 interface.

The *Bearer Channel Connection Protocol Multiplexor* agent provides and manages bearer channels on the V5.2 interface.

At **Layer 2**, a distributed Envelope Function architecture provides relay and payload termination services for messaging between physical devices and upper-layer agents. Supported D-channel types include p-type (D-channel packet data, SAPI 16), Ds-type (other D-channel data) and f-type (D-channel Frame Relay data).

CoV5.2 is available for pSOS, VxWORKS, VRTX, Nucleus (call for details), and Solaris (x86 and SPARC). CoV5.2 is compatible with several COTS platforms, including the ATLAS Darwin 860 family, Sun workstations outfitted with CoSystems programmable E1 communications adapters (SBus or PCI) and Motorola 68xxx and MPC860/8260 reference adapters.

A hardware/software **V5.2 Testbed** for Sun workstations is available, allowing you to bench test your AN or LE product without expensive protocol analyzers. The CoV5.2-Testbed includes dual CoSystems E1 adapters (PCI or SBus) for path protection switching, special software for real-time and profile simulation and compliance testing.



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