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Trunk Management

T1/E1 LIU Trunk Management Software

The NComm T1 & E1 LIU Trunk Management Software provides a software solution to enable line interface functionality to either supplement a T1 or E1 driver without LIU capabilities or to enable T1/E1 line interface functionality in a M13 multiplexing application.

Applications

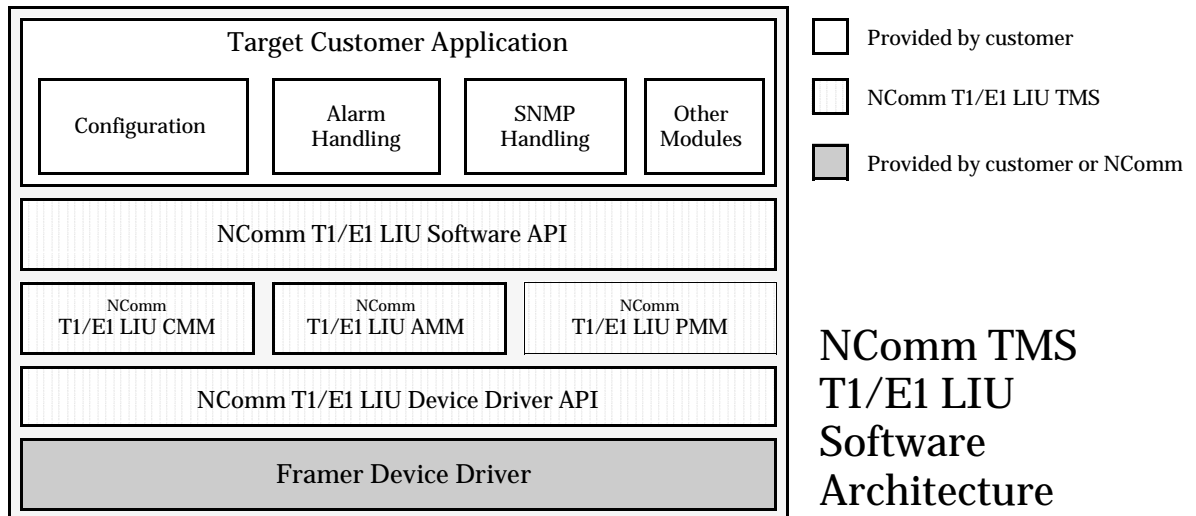
- T1 / E1 LIU
- M13 to T1 / E1

Main Features

- “Off-the-shelf” T1/E1 LIU software providing multiple levels of functionality based on product application
- Supports user choice of LIU device.
- Runs with or without Real Time Operating System (RTOS) on virtually any processor and host environment.
- Simple Application Programming Interfaces (APIs)
- Processor independent ANSI-C source code
- Fully customizable

T1/E1 LIU Trunk Management Software (TMS) Architecture

The figure below illustrates the TMS LIU software module architecture. Each software component performs specific functions that represent a part of the total T1/E1 LIU software solution. The APIs are comprised of a set of ANSI C functions and macros that encapsulate all functionality and data of the LIU Software. The API provides a clean interface simplifying the integration to the target application. The target application is implemented on top of the API layer, using the API to access all functionality provided by the T1/E1 LIU Software.





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The Configuration & Alarm Manager Modules provide the interface point for administering and configuring any of the T1/E1 spans controlled by the T1/E1 software.

The Configuration Manager (**CMM**) maintains the configuration data for the spans, providing a clean interface to configuration data for the other software components, and controlling how span data is updated at run time.

The Alarm Manager (**AMM**) maintains and controls the operating state of the individual spans, processing alarm conditions and other runtime conditions as they occur. T1 alarm capabilities meet the standards per T1.231; E1 alarm capabilities meet the standards per I.431, G.731, & ETSI 300-233.

The Performance Manager Module (**PMM**) provides support for span maintenance operations like loop backs and near end line performance monitoring. For T1 LIU, performance monitoring meets the standards per T1.231. It also handles bit-oriented code processing. For E1 LIU, performance monitoring meets the standards per G.826.

The Device Driver and its associated API provide the interface between the LIU-Software and the driver device. The LIU Driver API is comprised of a set of ANSI C functions and macros that handle the interaction with the device driver.

M13 Multiplexing to T1/E1

The T1/E1 LIU TMS package provides full functionality for M13 multiplexing applications when used in conjunction with DS3 TMS, see figure below.

