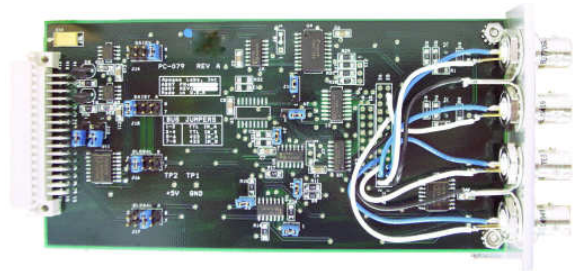


**MODEL IOC414**

**RS-422 TO TTL
AND
TTL TO RS-422
CONVERTER MODULE**



REAR VIEW



SIDE VIEW

1. FEATURES

- **Two RS-422 Level Inputs**
- **Two TTL Inputs**
- **Two RS-422 Level Outputs**
- **Two TTL Outputs**
- **Selectable RS-422 Input Termination (75 Ohm/120 Ohm)**
- **Selectable TTL Input Termination (50 Ohm/75 Ohm)**
- **Independent Output Polarity Selection**
- **High Current Outputs**
- **Inputs Drive Daisy Chain Bus and Global Bus**
- **Inputs Illuminate Front Panel LEDs**

2. OVERVIEW

The IOC414 is a full-duplex interface between TTL and RS-422 devices. The IOC414 module accepts two RS-422 and two TTL input signals. The RS-422 inputs signals are terminated into either 75 or 120 ohms (user selectable), converted to TTL levels to be output using a high-current drivers capable of transmitting into 50/75 ohm devices or cable. The A-LED on the front panel of an AL2073 chassis illuminates when an active RS-422 input signal is detected. The TTL level inputs are terminated into either 50 or 75 ohms (user selectable), converted to RS-422 levels and output using a standard RS-422 chip-set. The B-LED on the front panel of an AL2073 chassis illuminates when there is an active TTL input signal present. Each TTL and RS-422 output signal can be inverted (user selectable). Industry standard Triaxial and BNC connectors are used for all I/O connections. Maximum operating frequency of the IOC414 is 30M bits-per-second. The module can also drive the Daisy Chain bus and the Global Bus, in an AL2073 chassis, with either the TTL inputs or the RS-422 input signals (user selectable). The IOC414 requires two slots of the 14 available slots in an AL2073 chassis.

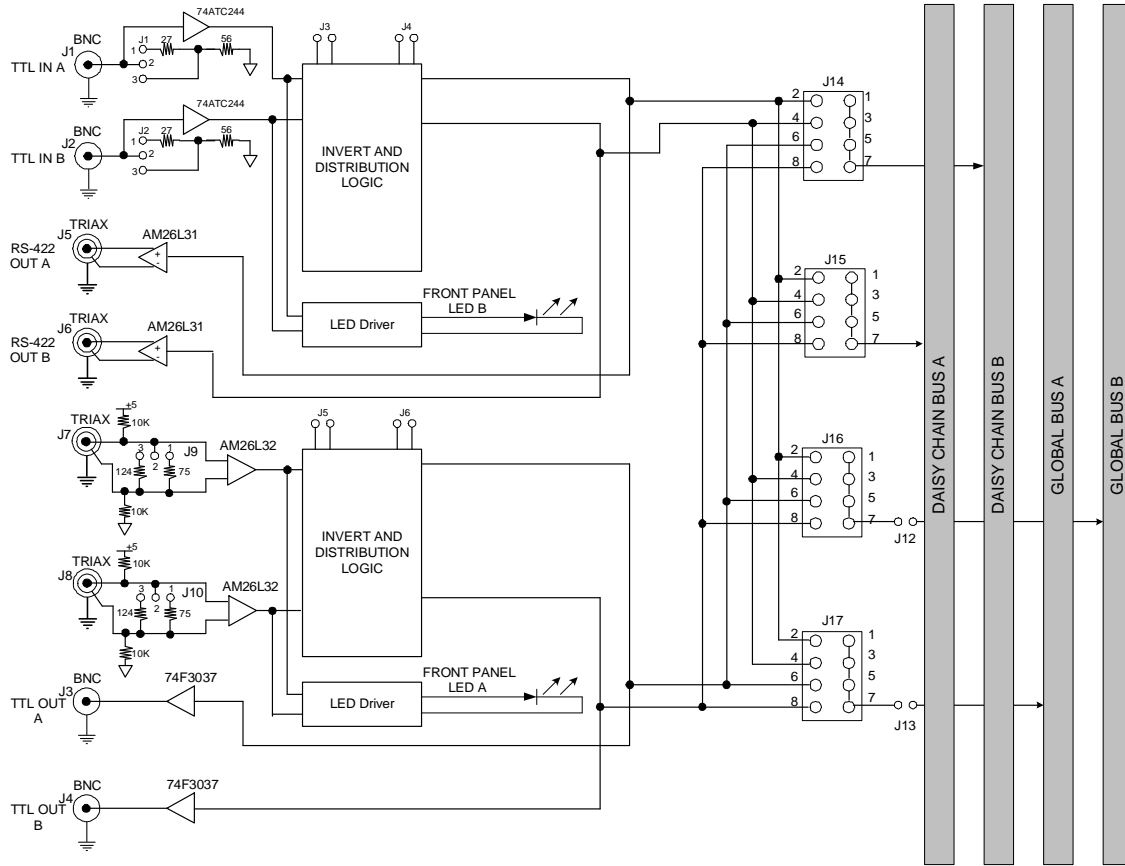


Figure 1: Model IOC414 Block Diagram

3. SPECIFICATIONS

GENERAL

4 Independent channels
 Dual Slot Module (3" x 6" x 0.9")
 Model 2073 Pluggable Interface Module
 Daisy Chain and Global Bus Compatible

INPUT (UP TO 30 MBIT)

Two TTL IN BNC
 Termination 50 ohm, 75 ohm, none
 Two RS-422 IN Triax, Trompeter BJ770
 Termination 75 ohm, 124, none

OUTPUT

Two TTL OUT BNC
 High Current
 Two RS-422 OUT Triax, Trompeter BJ770
 ANSI TIA/EIA-422-B standard

4. APPLICATION

The IOC414 is used to convert two RS-422 level signals to 2 TTL levels and two TTL signals to RS-422 levels. This module is a dual full-duplex TTL/RS-422 interface. This helps join equipment with unlike interfaces by appropriately converting the interfacing signals.

The IOC414 can be used in a distribution application where the daisy chain bus or global bus is used to distribute multiple copies of one or both input signals.

This module may be plugged into Apogee Models:
 2907 and 2908: Data Acquisition Mux/Demux
 6801: 5 Channel BERT Operation
 6804: Multi Channel Clock Recovery Un

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