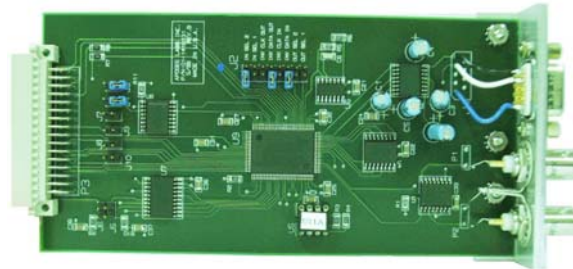**MODEL 2073 INTERFACER PRODUCT LINE**

IOC104

RS-232 TO TTL CODE CONVERTING MODULE

REAR VIEW   **SIDE VIEW**

FEATURES

- Fixed Format Code Conversion from NRZ-L to NRZ-M, NRZ-S, BIØ-L, BIØ-M, BIØ-S

- Conversion based on IRIG 106-01

- Ability to bypass the input without code conversion

- RS-232 Data and Clock Input

- High Current TTL Data and Clock Output

- Inputs illuminate front panel LEDs

- Drives Daisy Chain Bus and Global Bus

- Independent output polarity selection

OVERVIEW

The IOC104 PIM accepts NRZ-L data and clock at RS-232 levels, converts it to one of five IRIG standard data codes, and outputs it as TTL Data and Clock. All input and output polarities may be inverted independently. All odd numbered slots in the 2073 chassis have a front panel rotary switch. The TTL output Data Code is front panel switch selectable between NRZ-L, NRZ-M, NRZ-S, BIØ-L, BIØ-M, BIØ-S

The IOC104 uses a DB-9S input connector, two BNC output connectors, and operates up to 500 Kbps. The converted input signal is available to drive the Daisy Chain bus and the Global Bus which provides for the possibility of additional copies of the output data and clock signals if needed. The A LED will illuminate as long as there is an active clock input. The B LED will illuminate for both an active data and active clock input.

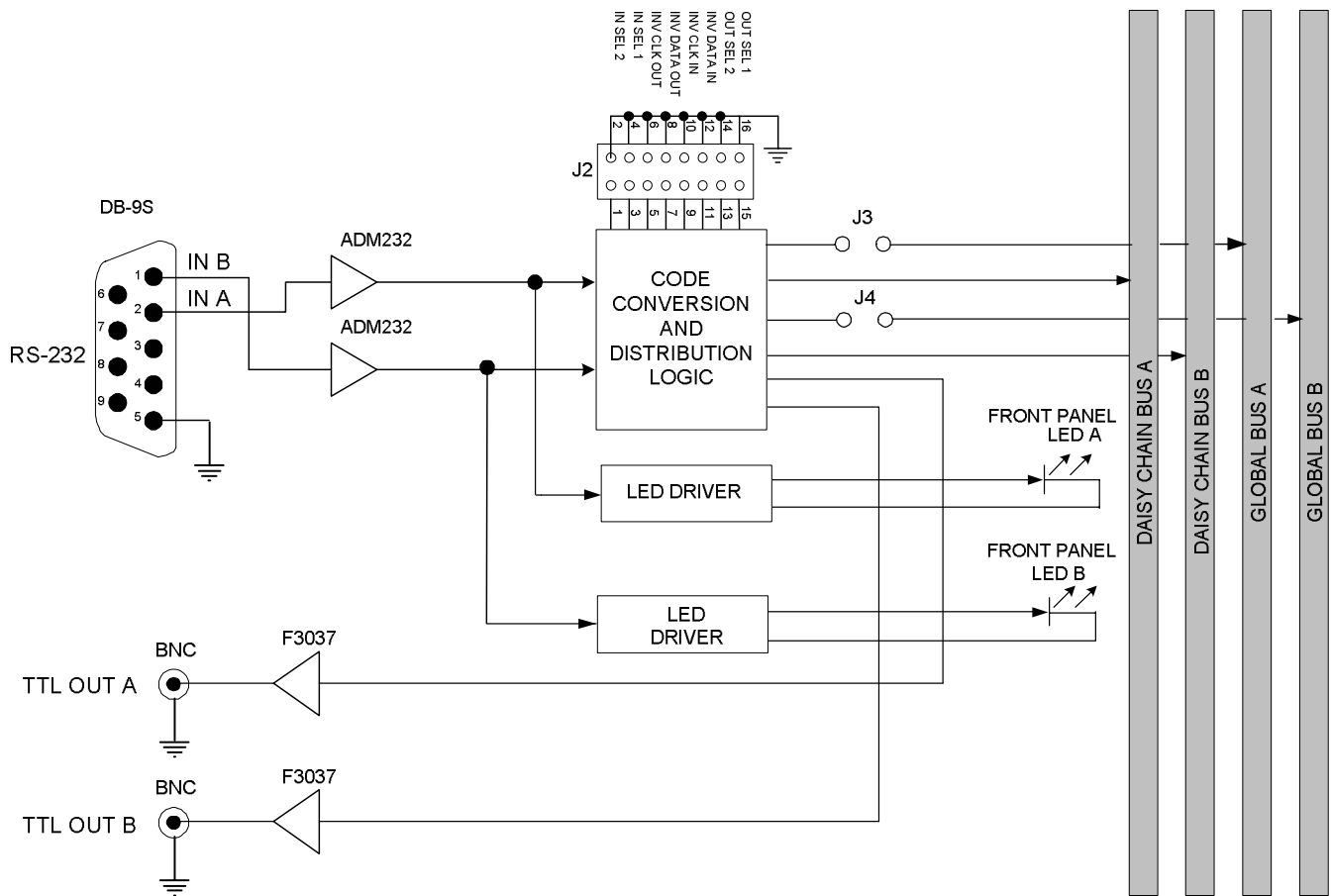The IOC104 requires one slot of the 14 available in the Model 2073.

Figure 1: Model IOC104 Block Diagram

SPECIFICATIONS

GENERAL

2 Independent channels
Single Slot Module (3" x 6" x 0.9")
Model 2073 Pluggable Interface Module

INPUT

RS-232 Level Inputs
DB-9S Connector
50/75-ohm selectable termination

OUTPUT

TTL Level Outputs
BNC Connectors

APPLICATION INFORMATION

The IOC104 is used to convert a RS-232 level NRZ-L data and clock pair to one of six possible IRIG codes. This helps join equipment with unlike interfaces by properly receiving and driving the signals.

The IOC104 may 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 also be plugged into Apogee Models:

2907 and 2908: Data Acquisition Mux/Demux

6801: 5 Channel BERT Operation

6804: Multi Channel Clock Recovery Unit

Table 1: IOC104 Module User-Configurable Jumper Settings

Jumper	Assignment
J1	Factory Configured
J2 OUT SEL 1	Not used in IOC104
J2 OUT SEL 2	Not used in IOC104
J2 INV DATA IN	Bridged: Inverted /Open: Normal
J2 INV CLK IN	Bridged: Normal/Open: Inverted
J2 INV DATA OUT	Bridged: Inverted /Open: Normal
J2 INV CLK OUT	Bridged: Inverted / Open: Normal
J2 IN SEL 1	Bridge to enable Global bus input
J2 IN SEL 2	Bridge to enable Daisy Chain bus input
J3	Bridge to enable Global Data (A) bus output
J4	Bridge to enable Global Clock (B) bus output
J5	Bridge to enable Daisy Chain Data (A) bus termination
J6	Bridge to enable Daisy Chain Clock (B) bus termination
J7	Bridge to extend the Daisy Chain Data (A) to next higher card lot
J8	Bridge to extend the Daisy Chain Clock (B) to next higher card slot
J9	Bridge to enable Daisy Chain output
J10	Bridge to enable Daisy Chain output