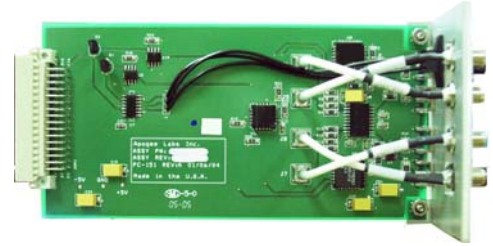


MODEL 2073 INTERFACER PRODUCT LINE

IOC310

DIFFERENTIAL NECL INPUT
TO
DIFFERENTIAL LVDS
OUTPUT
CONVERTER MODULE

Rear View



Side View

FEATURES

- Differential NECL Input (-0.8V to -1.8V)
- Differential LVDS Output (+0.4V to +1.4V)
- 1 Gbit operation
- Signal Input Activity indicators (LED)
- SMA Input/Output connectors
- Input transition Status Output

OVERVIEW

The IOC310 Pluggable Interface Module (PIM) accepts 2 each Differential NECL inputs and converts them into Differential LVDS outputs. The IOC310 uses 2 SMA input connectors and two SMA output connector per differential signal. Included is a status output connector that provides status of input activity. If input transitions are detected the status signal will be a TTL high while absence of transitions results in a TTL low. The IOC310 will operate to 1 Gbit. LED A illuminates when there is active differential NECL input on J1 and J2. LED B illuminates when there is active differential NECL input on J3 and J4. J9 connector contains active high TTL status that can be connected to the FOMCX1 status module. J9 pin 1 is a TTL high when input signal transitions are present on the A input, J9 pin 2 is a TTL high when input signal transitions are present on the B inputs, J9 pin 3 is a combination of the two status bits. Absence of input signal transitions for 500 ms results in a TTL low on the J9 status connector. The IOC310 requires two slots of the 14 available slots in the Model 2073 chassis.

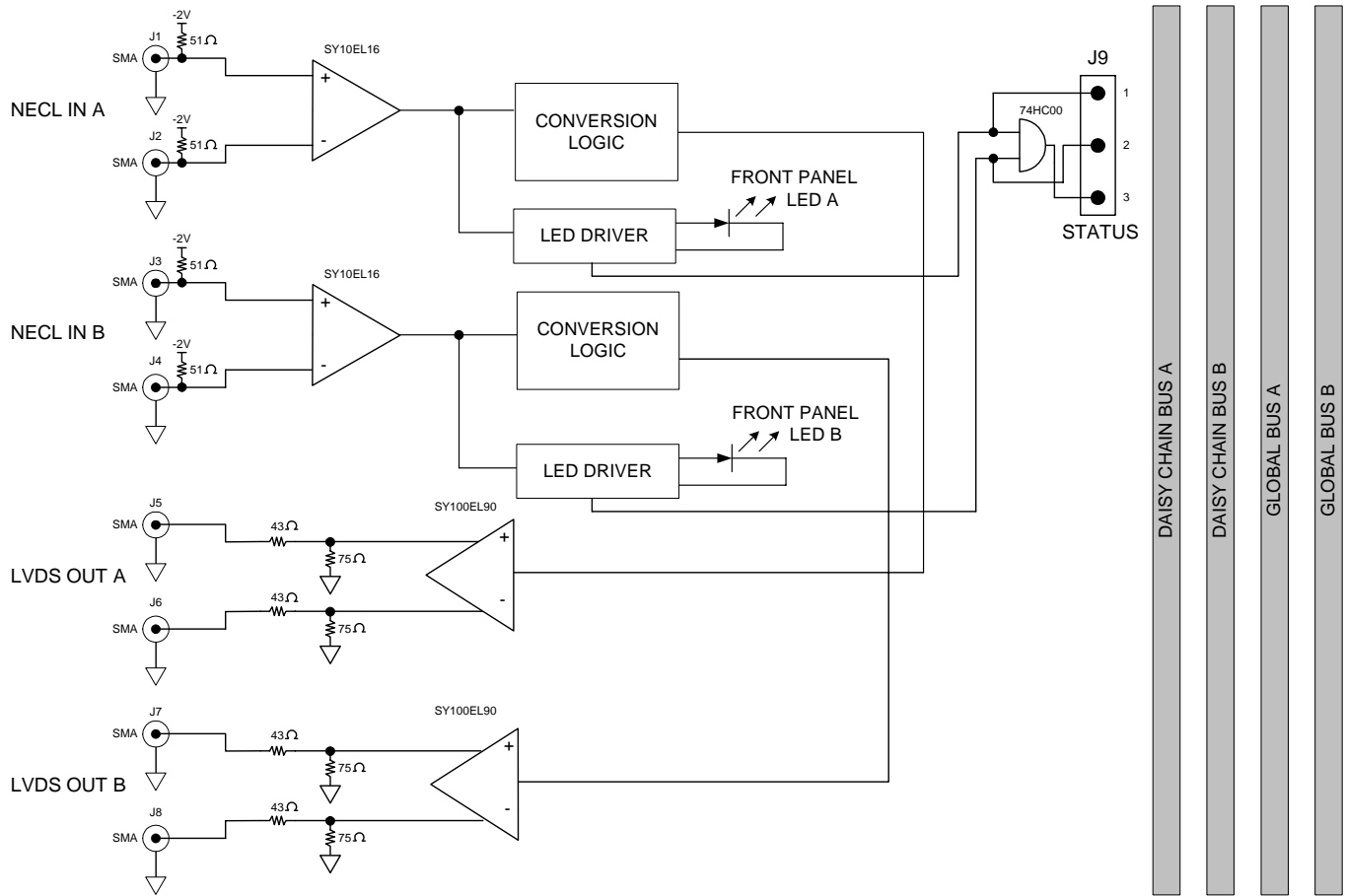


Figure 1: Model IOC310 Block Diagram

SPECIFICATIONS

GENERAL

Dual Slot Module (3" x 6" x 1.8")
 Model 2073 Pluggable Interface Module
 +5V, -5V, +2.5V

INPUT

2 each Differential NECL (-0.8V to -1.8V)
 2 each SMA connectors per input
 1 Gbit Clock Rate

OUTPUT

2 each Differential LVDS (+0.4 to +1.4V)
 2 each SMA connectors per output
 1Gbit Clock Rate

APPLICATION INFORMATION

The IOC310 is used to convert differential NECL data and clock to differential LVDS data and clock.

This joins equipment with unlike interfaces by properly receiving and driving the signals.

This module can be plugged into Apogee Models:

2097 and 2098: Data Acquisition Mux/Demux

6801: 5 Channel BERT Operation

6804: Multi Channel Clock Recovery Unit