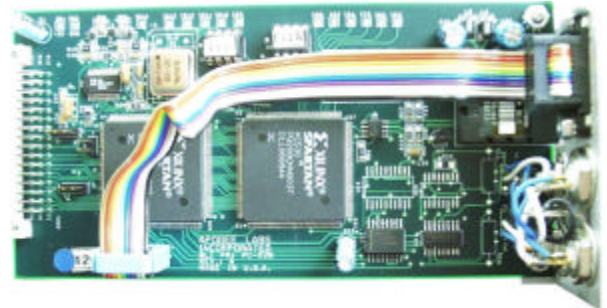**MODEL 2073 INTERFACER PRODUCT LINE**

IOC553

FIBEROPTIC / TTL TRANSMIT / RECEIVE MODULES

Rear view   Side view

## TTL Data and Clock Input/Output, Fiber (1) Input/Output

FEATURES

- ➢ TTL level Data and Clock Input/Output

- ➢ Single or Multimode Fiber optic Input/Output

- ➢ 1 fiber to move both data and clock signals

- ➢ DC Isolated Link

- ➢ Inputs Illuminate Front Panel LEDs

- ➢ 2kbps to 35Mbps Data Rate

- ➢ Auxiliary Inputs/Outputs for status bits

OVERVIEW

The IOC553 Pluggable Interface Modules (PIM) provide the ability to transfer electrical signals over optical cables. These modules are used to provide a DC isolated data link, provide a medium length (up to a few miles) data path and reduce radiated emissions. The transmitter accepts a serial synchronous data stream (data and clock) and converts it to an optical signal for transmission over either single mode or multimode fiber. The packetized data is received by the receiver module, which converts the optical signal back to its original TTL data and clock form. Auxiliary I/O for TTL level signals is available, via DB9 connector, for status bits such as bit sync lock indicator, alarms, etc. The IOC553 uses industry standard BNC, and SC or ST connectors, operates from 2kbps to 35Mbps and requires 2 of the 14 available slots in the 2073 chassis.

APOGEE LABS, INC.

BLOCK DIAGRAM(S)

IOC553 TX (TRANSMIT) BLOCK DIAGRAM
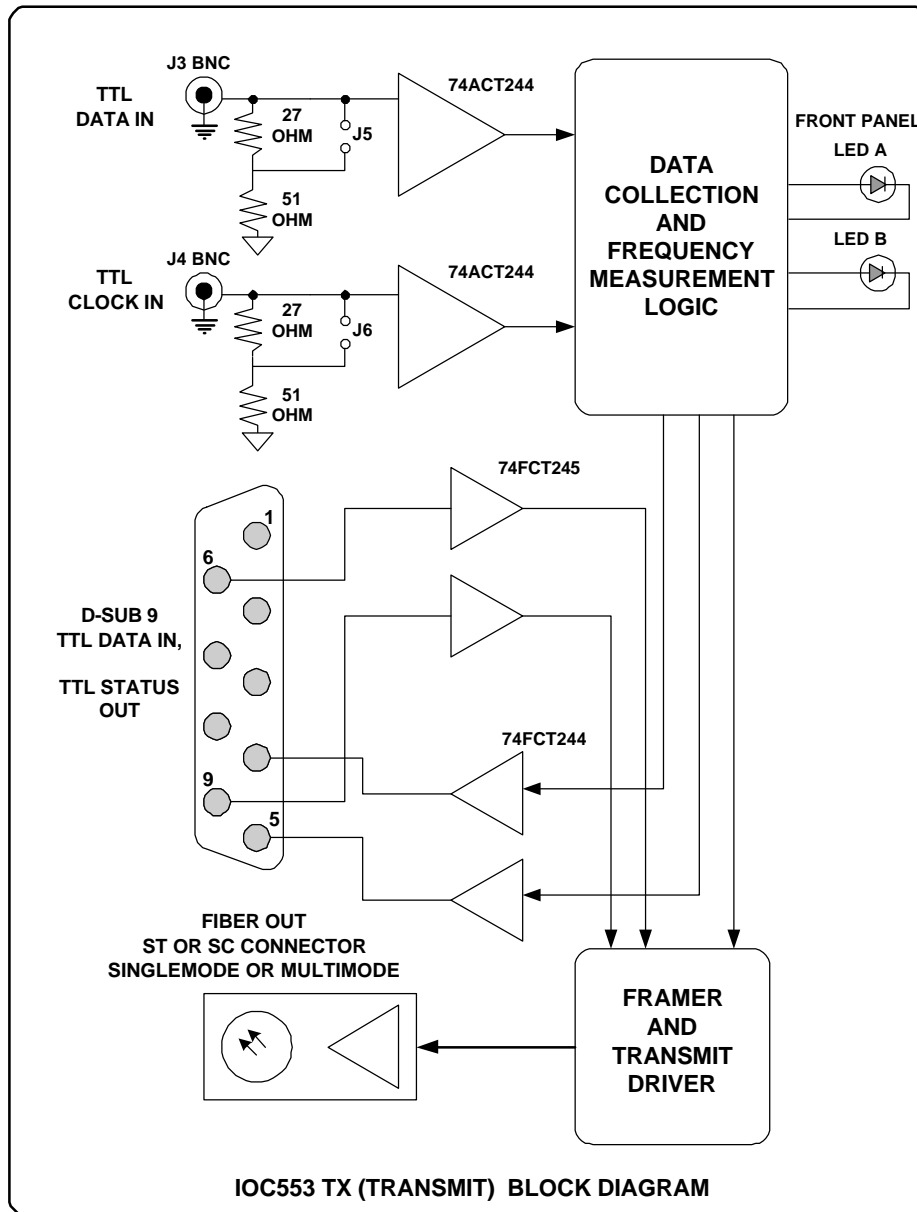
TX Module D-9 Pinout:	
PIN	**NAME**
1	NOT USED
2	NOT USED
3	NOT USED
4	TX DATA
5	TX CLK
6	AUX 1
7	GND TP
8	VCC TP
9	AUX2

IOC553 RX (RECEIVE) BLOCK DIAGRAM
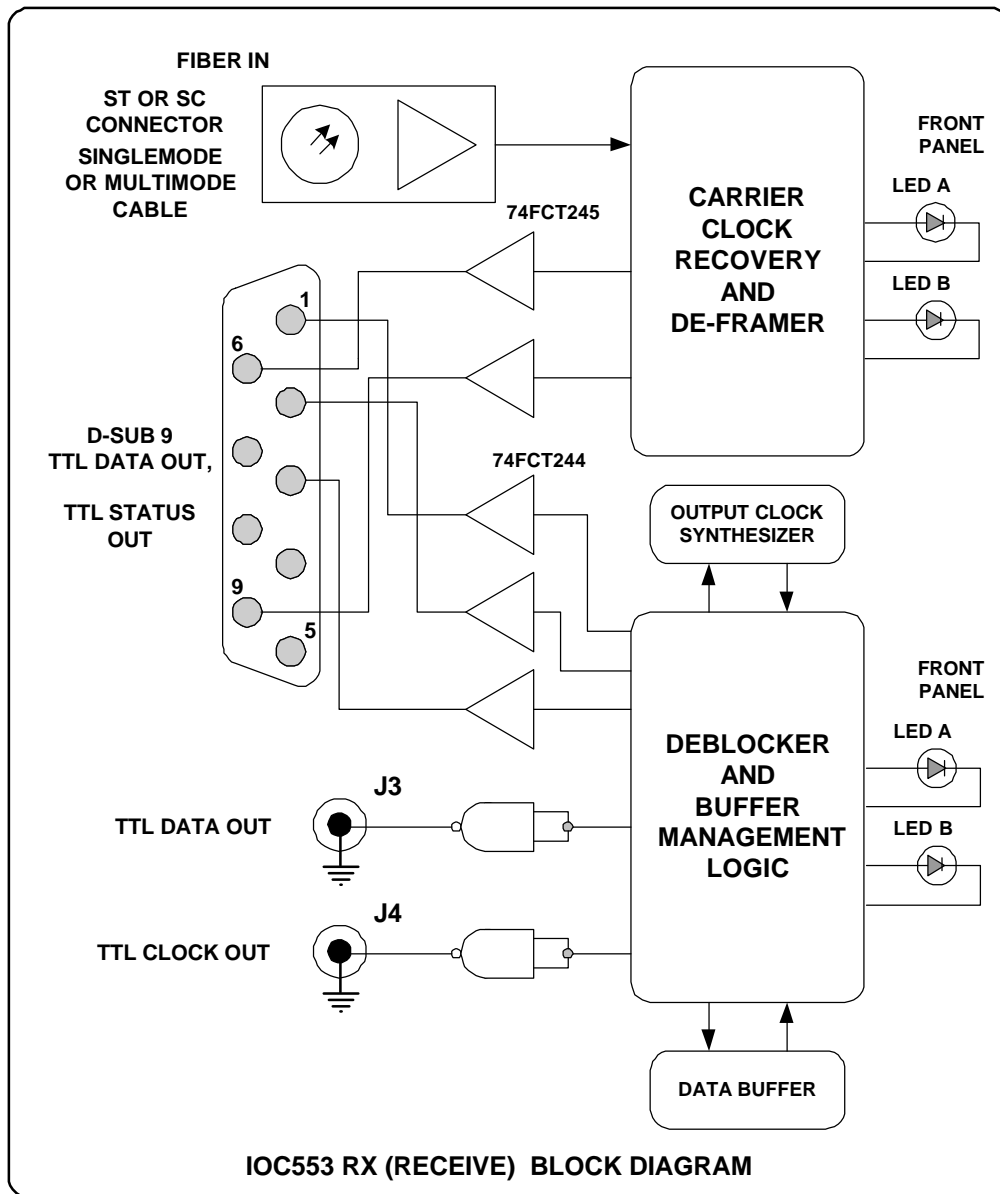
RX Module D-9 Pinout	
PIN	NAME
1	RX DATA
2	RX CLOCK
3	SIGNAL DETECT
4	NOT USED
5	NOT USED
6	AUX 1
7	GND TP
8	VCC TP
9	AUX2

SPECIFICATIONS

GENERAL
BNC connectors
ST or SC Fiber connectors
2 Slot Module (3" x 6" x 1.8")
Single or Multimode fiber
Model 2073 Pluggable Interface Module

ELECTRICAL SIGNAL INPUT
TTL
50ohm/75ohm termination

ELECTRICAL SIGNAL OUTPUT
TTL
High current

OPTICAL SIGNAL I/O
ST or SC type Connectors
Single or Multimode
1300 nm Wave length

APPLICATION INFORMATION

The IOC553 is used to distribute synchronous data and clock across long lengths (3 miles) of fiber cable. It utilizes industry standards for both the electrical and optical signal interfaces. The units are self adjusting to any data rate within its specified range requiring no operator setup.

This module can also be plugged into Apogee Models:
2097 and 2098: *Data Acquisition Mux/Demux*
6801: *5 Channel BERT Operation*
6804: *Multi Channel Clock Recovery*