

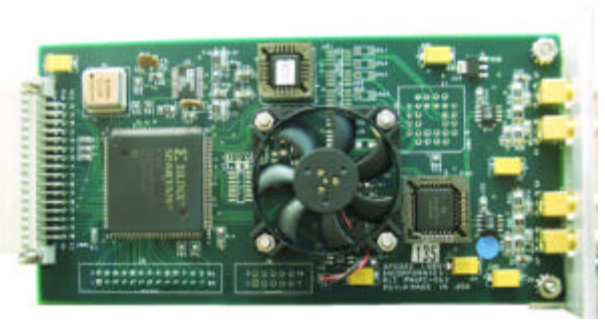
MODEL 2073 INTERFACER PRODUCT LINE

IOC554

FIBER OPTIC / ECL
TRANSMIT / RECEIVE
MODULES



Rear view



Side view

ECL Data and Clock Input/Output, Fiber (1) Input/Output

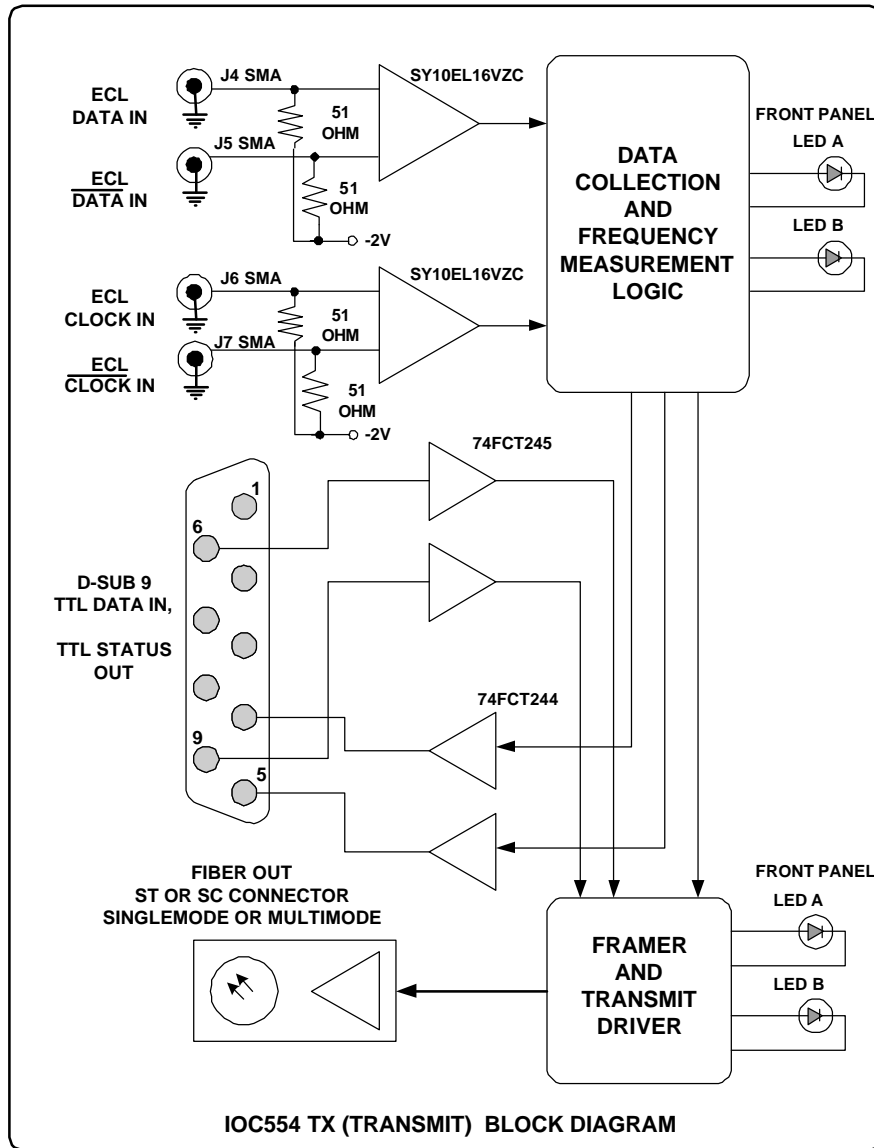
FEATURES

- Negative ECL Differential 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 LED's
- 20Mbit to 120Mbit Data Rate
- Auxiliary Inputs/Outputs for status bits

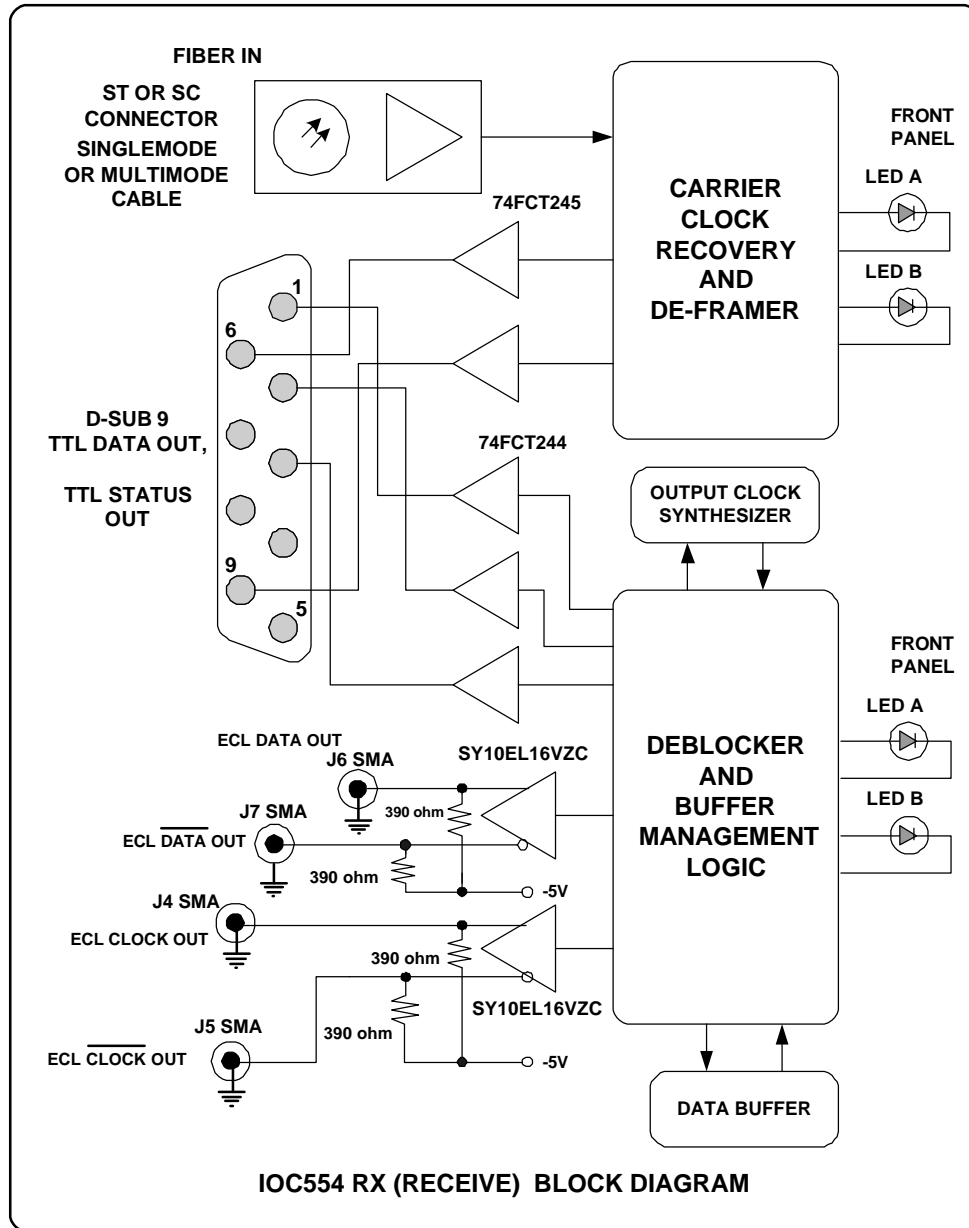
OVERVIEW

The IOC554 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 ECL 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 IOC554 uses industry standard SMA or TRIAX, and SC or ST connectors, operates from 20Mbits to 120Mbits and requires 2 of the 14 available slots in the 2073 chassis.

BLOCK DIAGRAM(S)



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



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

SMA or TRIAX ECL 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

NECL
50ohm termination to -2V

ELECTRICAL SIGNAL OUTPUT

NECL
High current

OPTICAL SIGNAL I/O

ST or SC type Connectors
Single or Multimode
1300 nm Wave length
155.54Mbit operation

APPLICATION INFORMATION

The IOC554 is used to distribute data 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*