

MODEL 2073 INTERFACER PRODUCT LINE

**FOMCX1
FIBER OPTIC MODULE
CONTROLLER**

**FIBER MODEM,
STATUS (7) INPUT,
RS232 (1) RJ45 OUTPUT**



Rear View



Side View

FEATURES

- 16 Discrete Bit Status Monitor
- Four Independent Fiber Modem Status Inputs
- Three Independent Power Supply Status Inputs
- One RS232 Output to Remote Computer
- RS232 Output illuminates front panel A LED
- Processor activity illuminates B LED

OVERVIEW

The FOMCX1 Pluggable Interface Module (PIM) accepts status signals from power supplies and fiber optic modules such as the IOC553, IOC554 or the IOC555 PIM and makes them available to a computer via RS-232 interface.

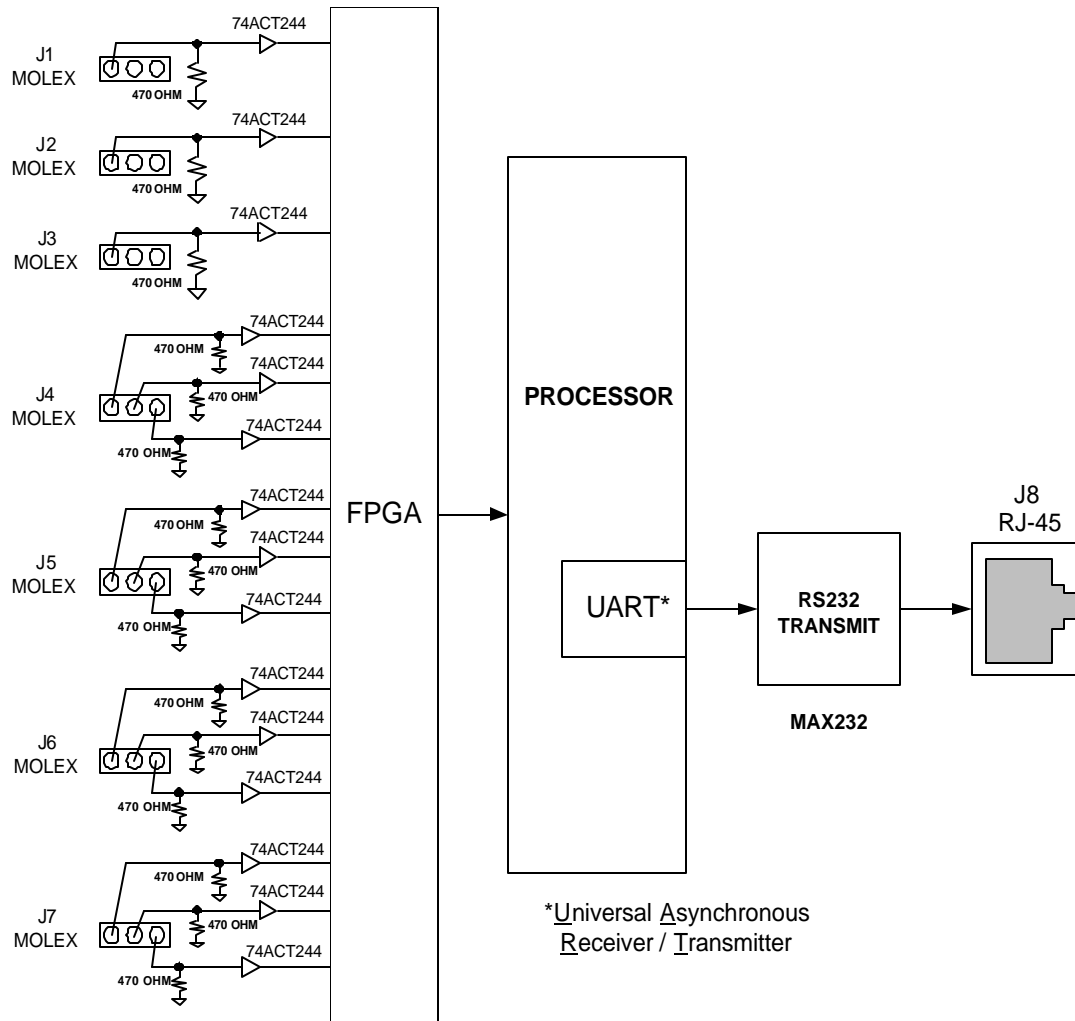


Figure 1: Model 2073-111-FOMCX1 Block Diagram

SPECIFICATIONS

GENERAL

7 Input Channels, 1 Output Channel
Two Slot Module (3" x 6" x 1.8")
Model 2073 Pluggable Interface Module

INPUT

TTL Level Inputs
MOLEX Connectors
470-ohm Termination

OUTPUT

RS-232
RJ45 Connector

APPLICATION INFORMATION

The FOMCX1 is designed for use in automated and remote environments. Up to 16 discrete bits from power Supplies, Fiber Modules, Bit Syncs can be sampled via RS-232 for monitoring remotely/archiving purposes.

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 Unit

OPERATION

Quick-look activity indicators on the front panel of the 2073 chassis provide activity status of the FOMCX1 card. The A LED will illuminate during RS-232 output activity. The B LED flashes to indicate processor activity.

RS-232 protocol is: 1 start | 8 data | 1 stop | No parity | 9600 baud

There are no user setups necessary to the FOMCX1. The FOMCX1 continually samples data present at the status inputs. The status data is available to the user over the RS-232 interface by issuing a read status command. Each time the read command is received the most recent values present on the status connectors is formatted into a HEXIDECIMAL number and output as an ASCII string.

The read command is five ASCII characters consisting of:

“READ<CR>”

The response strings is 5 characters consisting of

“abcd>”

Where “abcd” represents the 16 status bits and ‘>’ is the command ACKNOWLEDGE character.

Negative acknowledge response to a command appears as “NAK+?”

The status bits correspond to bits 15-0 in table 1 below which are high true. Bits are transmitted MSD first so ‘a’ represents bits 15,14,13,12 and ‘d’ represents bits 3,2,1,0. As an example, a response of ‘9240>’ indicates true status on Pin 3 of J4, J5, J6 and J7. The status ward bit configuration is:

Table 1: Status Bit Configuration

'a'				'b'				'c'				'd'							
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0				
J7 Status				J6 Status				J5 Status				J4 Status				Sec	Sec	PRI	PRI
3	2	1	3	2	1	3	2	1	3	2	1	-5	+5	-5	+5	(J3)	(J2)	(J1)	(J1)

All Status bits are high true.

Table 2: J8 Interface

Pin	FUNCTION
3	Receive Data
6	Transmit Data
8	Ground