MODEL 6762
32-Channel TTL Logic-to-POF Fiber Interface Converter

Catalog# 306762

Electro Standards Laboratories

ADVANCED SYSTEMS DESIGN & SERVICES

INFORMATION

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INTRODUCTION

The Model 6762 is a 32 - Channel High Speed TTL Digital Logic Level to POF Interface Converter from Electro Standards Laboratories. It translates 32 input logic pairs into 32 fiber TX pairs, resulting in a total of 64 fiber optic connections. Typical operating speeds are up to 10 Mbps.

Features include ESD protection on all copper interfaces, convenient Versatile Link POF connectors, and TTL logic level test points for signal monitoring. The block diagram is shown below.

(Note: Test points are located on the circuit board inside the enclosure.)

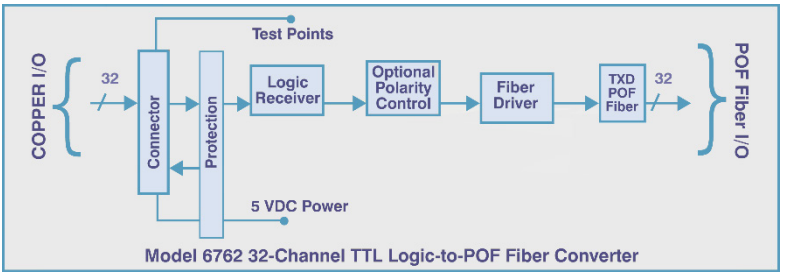

Figure 1: Model 6762 Block Diagram.

OPERATION

Fiber Optic Connections

The fiber optic connectors are Versatile Link Plastic Optical Fiber (POF) type. They are located on the front panel of the unit. The channels are (TX1 – TX32) which correspond to the copper connections on the rear panel.

Figure 2: Model 6762 front panel.

Power/TTL Connections

The unit is powered by an included 5VDC power supply. Power is supplied via a 2-pin Phoenix connector. The power supply input is protected from overvoltage, overcurrent, and high-power transients. All TTL copper connections feature ESD protection of ±8kV contact discharge, ±15kV air discharge, (IEC61000-4-2). The copper input connections are made via the 68-pin SCSI connector located on the rear of the unit. The pin-out is shown in Table 1.

Figure 3: The Model 6762 rear panel.

68-pin SCSI	Signal	68-pin SCSI	Signal
Pin 1	POF TX CH 32	Pin 35	POF TX CH 31
Pin 2	GND	Pin 36	GND
Pin 3	POF TX CH 30	Pin 37	POF TX CH 29
Pin 4	GND	Pin 38	GND
Pin 5	POF TX CH 28	Pin 39	POF TX CH 27
Pin 6	GND	Pin 40	GND
Pin 7	POF TX CH 26	Pin 41	POF TX CH 25
Pin 8	GND	Pin 42	GND
Pin 9	POF TX CH 24	Pin 43	POF TX CH 23
Pin 10	GND	Pin 44	GND
Pin 11	POF TX CH 22	Pin 45	POF TX CH 21
Pin 12	GND	Pin 46	GND
Pin 13	POF TX CH 20	Pin 47	POF TX CH 19
Pin 14	GND	Pin 48	GND
Pin 15	POF TX CH 18	Pin 49	POF TX CH 17
Pin 16	GND	Pin 50	GND
Pin 17	POF TX CH 16	Pin 51	POF TX CH 15
Pin 18	GND	Pin 52	GND
Pin 19	POF TX CH 14	Pin 53	POF TX CH 13
Pin 20	GND	Pin 54	GND
Pin 21	POF TX CH 12	Pin 55	POF TX CH 11

Pin 22	GND	Pin 56	GND
Pin 23	POF TX CH 10	Pin 57	POF TX CH 9
Pin 24	GND	Pin 58	GND
Pin 25	POF TX CH 8	Pin 59	POF TX CH 7
Pin 26	GND	Pin 60	GND
Pin 27	POF TX CH 6	Pin 61	POF TX CH 5
Pin 28	GND	Pin 62	GND
Pin 29	POF TX CH 4	Pin 63	POF TX CH 3
Pin 30	GND	Pin 64	GND
Pin 31	POF TX CH 2	Pin 65	POF TX CH 1
Pin 32	GND	Pin 66	GND
Pin 33	**NC**	Pin 67	**NC**
Pin 34	**NC**	Pin 68	**NC**

Table 1: 68-Pin SCSI Connector Pin-out

APPENDIX A -- SPECIFICATIONS

Copper Interface:

Type: TTL Logic
Vih range: (1.4 – 2.1) Volts
Vil Range: (0.6 – 1.4) Volts

Optical Interface:

TX Power: -3.5 dBm
RX Sensitivity: -23dBm
Wavelength: 650nm, Multimode
Link Distance: Up to 50 meters with 1mm Plastic Optical Fiber (POF) and
Up to 500 meters with 200µm Hard Clad Silica (HCS)

Fiber Polarity:

TTL Logical 0 = Fiber Light OFF
TTL Logical 1 = Fiber Light ON

Data Bit Rate:

Up to 10 Mbps

Power:

Supply Voltage: (4.75 – 5.25) Vdc
Supply Current: 1.5 Amps

Connectors:

Copper: (1) – 68-Pin SCSI Connector

Fiber: (32) – Versatile Link Plastic Optical Fiber (POF) Connectors
(32) – TX
Power: (1) – 2 Position Phoenix

Operating Environment:

-40˚C to +85˚C

Mechanical Dimensions:

Model / Cat No: 6762/306762 (Enclosed Unit)
Size with Enclosure: 19” L x 3.5” H x 8.4” D [48.2 x 8.8 x 21.3 cm]
Weight with Enclosure: 6.1 lbs [2.8 kg]

CUSTOMER & TECHNICAL SUPPORT

Customer Support

For customer assistance, ordering assistance or communications cables of any length or configuration, please contact Electro Standards Laboratories, (877) 943-1164 and ask for sales/customer support.

Technical Support

For technical support with unit operation, cable configuration, etc., please contact Electro Standards Laboratories, (877) 943-1164 and ask for technical support. Please have the unit model number and serial number available when you call.