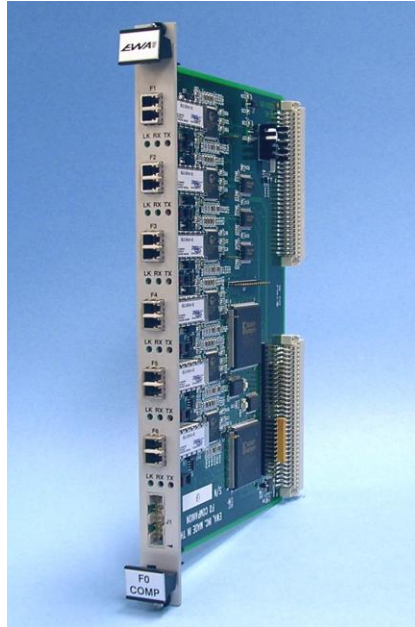


# Fiber Optic Companion Board



## Features

- Translates TTL to Fiber Optic
- Access to 64 TTL signals on P2 VME Backplane
- 6 Independent Fiber Optic Ports on Front Panel
- Bi-Directional Fiber Optic Ports
- 200 MB/s Fiber Optic Ports

## General Description

The Fiber Optic Companion Board (FO-CB) offers users a unique solution for sending real-time control signals reliably over long distances. The FO-CB translates TTL I/O signals available at the VME P2 backplane into fiber optic signals available at the front panel.

Two Xilinx FPGAs, one dedicated to transmit operations and one dedicated to receive operations, are used to steer real-time commands to/from the VME P2 backplane from/to the front panel fiber optic links. Each FPGA can be programmed independently to direct realtime signals through any combination of 6 - 200 MHz (200 MB/s) fiber optic links capable of transmitting reliable signals up to 1 km.