

8086 SOFTWARE FOR AN OPTICAL FIBER LAN INTERFACE

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The implementation of a Local Area Network with an Optical Fiber as the Physical medium is proposed, and as a part of the project software for interfaces was developed using 8086 Assembly Language. A PC/AT level machine is selected for the purpose of testing the software prior to actual hardware implementation.

When writing software attention is focussed in configuring two serial RS232 communication ports, say COM1 and COM2 of the PC/AT machine, as the Network side port and the Host machine side port of the interfaces respectively.

Software and hardware necessary to increase the speed of the data transfer in the Physical Medium, even when the Host machine and Interface portion of the network is operating at a low speed, is also included. The proposed minimum speed of the data transfer in the network is 1 Mbps and which can be extended upto 50 Mbps with the help of the excellent features of the Optical Fiber Physical Medium.