APOGEE LABS

2319

ETHIO5 2-Channel Ethernet Bridge Module

FEATURES

- Single slot module
- 2 independent Ethernet bridge channels
- High performance bridge for Ethernet LANS
- Supports 10/100/1000 connectivity
- Duplex operation supports TCP/IP and UDP

- Automatic MAC address learning
- Fast filtering
- Programmable bridge transfer speeds
- Programmable channel ID tag
- Supports rates up to 35 Mbsp

OVERVIEW

The ETHIO5 plug-in module is a single slot wide AL43xx series compatible card that contains (2) RJ-45 connectors on its I/O panel for 10/100/1000 BaseT LAN connection. The 2319 is a high performance, remote, self-learning Ethernet bridge module that connects to both the multiplex and demultiplex backplane of the chassis buses to implement full duplex operation. It automatically learns MAC addresses on the LAN to which it is connected and only forwards frames destined for another LAN that is expected to reside at the location of the other MUX/DEMUX.

The interconnecting MUX/DEMUX bandwidth is user selectable and can be set to tradeoff between transfer speed / (throughput delay), and MDM bandwidth to be retained for other data operations. Referred to as a bridge transfer speed, the wide range of 100 Kbps up to 35 Mbps is supported.

A Channel ID is appended by encapsulating the Ethernet frames in the MUX/DEMUX source packet data units. This allows multiple ETHIO5 modules to be placed into a chassis to provide multiple LAN bridges. If the Ethernet systems support unidirectional data flows, multiple ETHIO5 modules can be programmed to receive the same channel ID. These modules will then output multiple copies of the source Ethernet packets, implementing a broadcast facility.

SPECIFICATIONS

INPUT / OUPUT
- 2 full duplex Ethernet channels
- Full duplex operation

ETHERNET
- Compliant with IEEE 802.3 / Ethernet V.2
- 10/100/100 BaseT connectivity
- Up to 120 (64 byte) frame buffer
- Selectable bridge transfer speed: 100 Kbps to 35 Mbps

CONNECTORS
- RJ-45 type connectors

COMPLIMENTARY HARDWARE
- 4033 AETHI2 Module
- 4034 AETHO Module