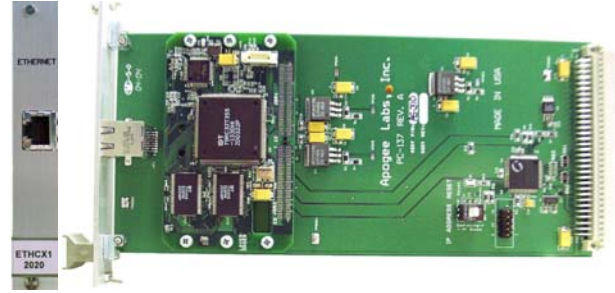**APOGEE LABS**

2020

ETHCX1

ETHERNET
CONTROLLER MODULE

1.   FEATURES

➢ Single slot module

➢ Automatically replaces existing remote control

➢ Complies with 10 base-T Ethernet operation

➢ Fully supports Apogee Labs standard full duplex remote control protocol

➢ Switch-enabled automatic reset of default IP address setting

2.   OVERVIEW

The Apogee Labs Model 2020 ETHCX1 module provides a remote control facility for an AL4300 Series chassis using an Ethernet 10 base-T link. This facility supports all the remote control commands listed in the individual manuals for the AL4300 modules installed in the chassis. These commands are ASCII coded control and status interrogation commands, each of which are individually Acknowledged. This is designated as the Network Native ASCII Transfer or NNAT remote control mode.

The control processor on the ETHCX1 receives incoming data from the Ethernet. Completed commands received are then sent to the front panel controller of the chassis via the internal ALISDT bus. The front panel controller in turn directs the data to the selected module. This target module processes the command and provides a response back to the front panel controller, which forwards this to the ETHCX1. The ETHCX1 holds the response until interrogated from the Ethernet.
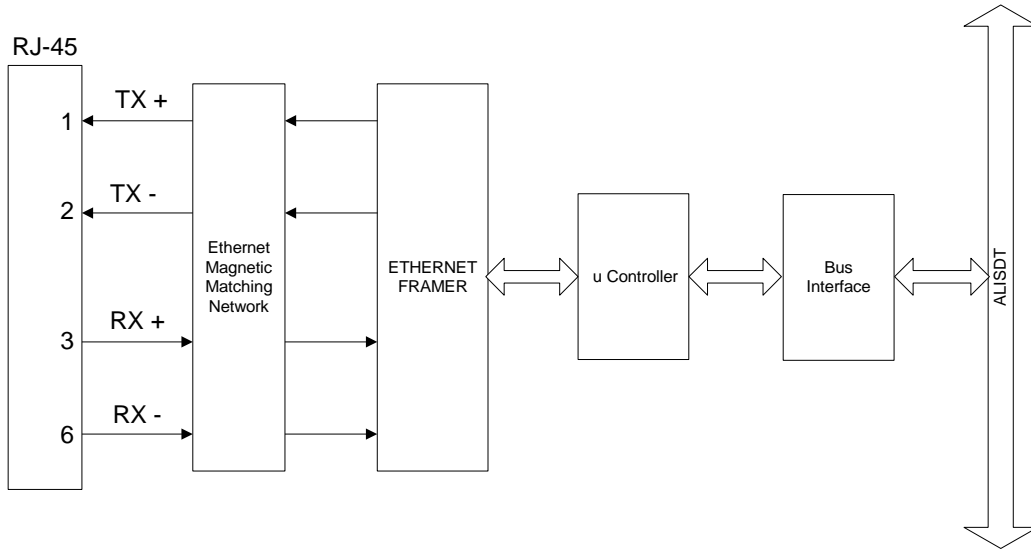
Figure 1 - ETHCX1 Simplified Block Diagram

3.   SPECIFICATIONS

- ➢ Compliant with IEEE 802.3 / Ethernet V.2
- ➢ 10 Base-T operation
- ➢ RJ-45 connector
- ➢ Full duplex operation

- ➢ Supports TCP/IP and Apogee Labs NNAT
- ➢ Occupies one AL4300 chassis slot