APOGEE LABS

MODEL 2061

ABI1
FOUR CHANNEL
AVIONIC BUS MIL-STD-1553
INPUT MODULE
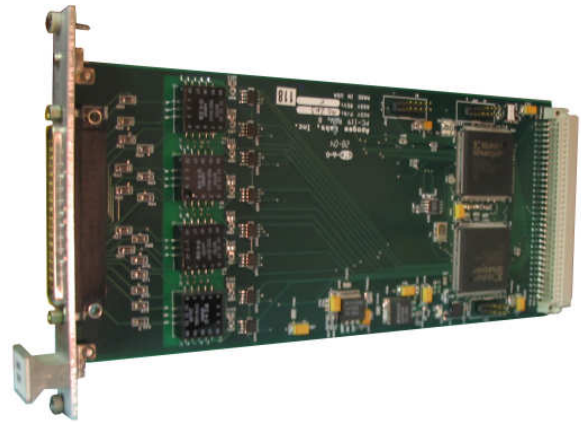
1. FEATURES

- ➢ **MIL-STD-1553 A/B Bus Compatible**
- ➢ **Four Channel Input**
- ➢ **Each Channel Redundantly Monitors A & B Paths**
- ➢ **Transformer and Resistor Isolated Inputs**
- ➢ **37-Pin D Type Connector**
- ➢ **Full Module Control and Monitoring via AL4300 Front Panel and Remote Control**
- ➢ **No Hardware Configuration Required**
- ➢ **Simple Programming**
- ➢ **Transparent to Information Content**
- ➢ **Reports Data Activity**
- ➢ **1 AL4300 Card-Slot**

2. PURPOSE

The ABI1 module is designed to monitor up to four redundant MIL-STD-1553 A/B busses. Each input to the ABI1 is transformer isolated (Figure 1). Both the "A" and "B" inputs of each channel are individually enabled or disabled. The module accumulates the traffic on each enabled input bus and produces digital packets of information that are then merged to the AL4300 multiplex bus. Activity on each input path is detected and reported to the front panel and remote control interface. Information produced by the ABI1 is compatible with the Apogee Labs companion module, model 2069 ABO1 (MIL-STD-1553 Output Module).
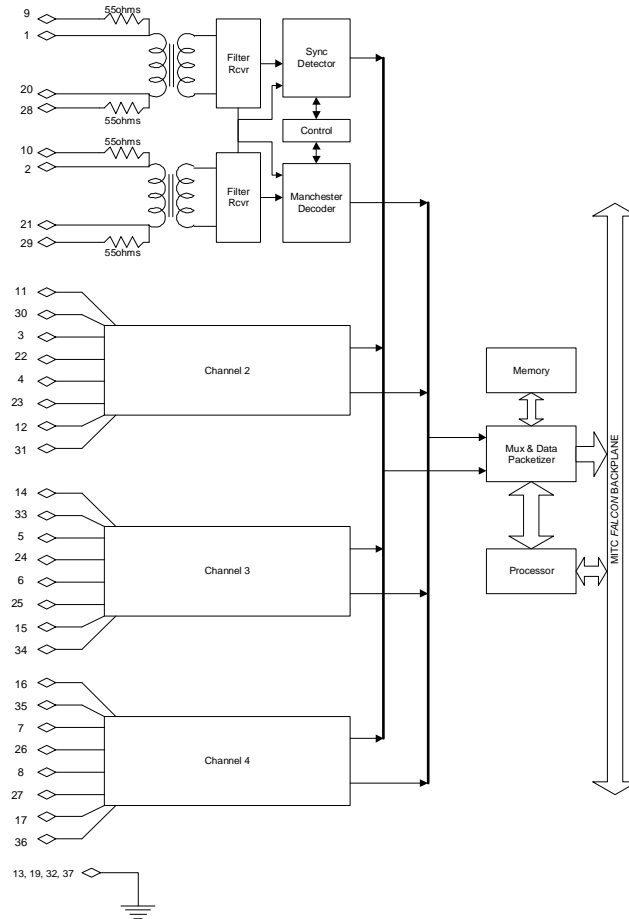
Figure 1: Model 2061 ABI1 Block Diagram

3. SPECIFICATIONS

NUMBER OF CHANNELS

Four redundant channels, A and B ports are individually controlled and monitored

Transformer or Resistor Coupled Inputs

CHANNEL ID

11-BIT Programmable Value

COMPATIBILITY

AL4300 Bus Compatible

Operates at 1ms or 10ms SI

Single card-slot width

Compatible with MIL-STD-1553 A/B

BANDWIDTH USAGE

1M bps (+ overhead – 96k bps for 1ms SI or 9.6k bps for 10ms SI) used by each enabled data path

CONNECTOR

37-Pin D type Male

POWER CONSUMPTION

7W