

Advanced DAQ Series Control Board









Product Overview

The Control Board is part of LINK's Advanced DAQ Series which represents the next evolution of our control and acquisition testing solutions. The Control Board is the heart of the data acquisition I/O system consisting of a high performance embedded controller and an 8 slot backplane populated with a variety of accessory boards. The Control Board has high reliability, and the modularity of this system permits the mix of accessory boards to be selected to match the application. Available accessory boards include signal conditioning for common transducer types such as strain gages, encoders, thermocouples, LVDT, as well as accessory boards for general purpose analog I/O. A specialized servo controller accessory board is available for applications that require high accuracy PID control. This servo board has a dedicated microcontroller and also communicates with the control computer via Ethernet.



Key Benefits

- Higher data acquisition rate up to 40 kHz across all channels
- Easy drop-in replacement for existing LINK DAQ (4649) boards
- Capability to implement onboard program execution to realize faster control loops and real-time control
- Expandable functionality











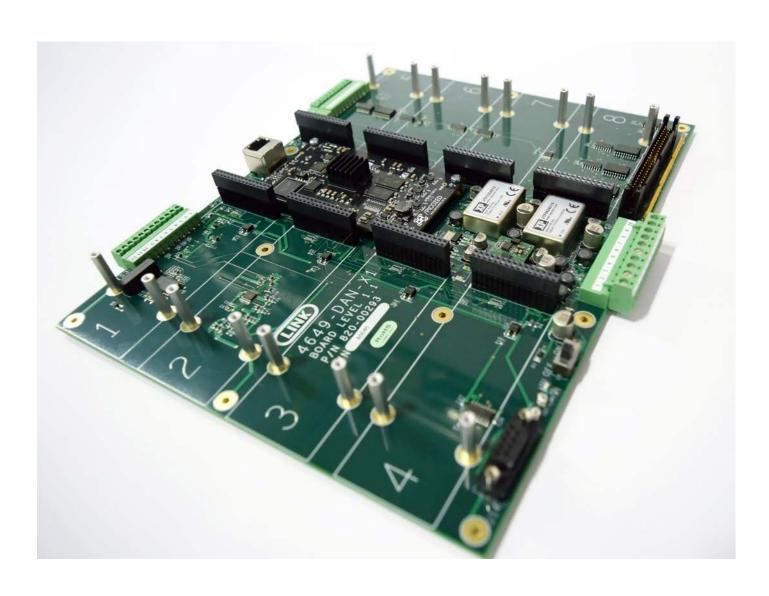






Product Capabilities

- Gigabit Ethernet Communications
- Simultaneous data sampling up to 40 KHz and driven by FPGA technology
- Isolated CAN communication channel
- Single RS-232 port
- 667 MHz Arm core processor dedicated to running ProLink Scripts
- 8GB of on board eMMC nonvolatile memory
- 32 Digital I-O for control applications
- On board power supply monitor
- Designed to be compatible with ProLINK controlled machines



Data Acquisition I/O System	
Advanced DAC Series Control Board	8 slot, Ethernet, real time ARM core processor, FPGA technology, programmable on board scripts, Expandable
Supported Accessory Boards	
Analog Input	8 channel, +/- 10 V signal, differential input, used for process and control signals
Analog Output	4 channel, +/- 10 V signal, isolated, used for process and control signals
Strain Gage Amplifier	4 channel, variable gain, shunt calibration, used for strain gage transducers
Counter Interface	5 channel, sensor excitation, isolated, used for encoders and other pulse type transducers
Thermocouple Conditioner	8 channel, J K or T type thermocouples, isolated, used for thermocouple temperature measurements
LVDT Conditioner	4 channel, AC sensor excitation, used with AC type LVDT transducers for displacement measurements
Digital Input / Output	32 channel, directly pluggable to Opto 22 I/O board, used for control applications
SSI Conditioner	4 channel, isolated, used for transducers with synchronous serial interface (SSI)
Servo Controller	Closed loop servo control, on board microcontroller, used for high performance closed loop control

