

LINBus Communication Card for ADwin-Pro-II

For ADwin Real-Time Data Acquisition System Solutions

The Pro-II-LIN-2 card for ADwin-Pro-II systems provides convenient LIN communications capabilities that can be used to test different types of sensors, switches and other mechatronic devices in distributed automotive applications. The card, which is fully compatible with the LIN 2.1 interface standard, has 2 single wire LIN serial communications ports that can be individually configured as a master or slave with transfer rates up to 19,200 kBit/sec and standard or enhanced checksum verification. Each port features 64 message boxes, each with a programmable identifier header, that can be used to send or receive data packets up to 8 bytes. Depending on the card configuration, master or slave, the appropriate bus termination is automatically selected to ensure reliable communications. All 4 transfer operating modes are available, including master send, master receive, slave receive and slave send. A library of functions is available to initialize, configure, read data and write messages. Additionally, the card provides additional timing diagnostic information including the total message transfer time and the response time from request to the receipt of data.

The Pro-II-LIN-2 card is just one of over 80 different plug-in cards available for the ADwin-Pro-II real-time data acquisition and control system. These customizable cards provide a comprehensive set of capabilities for high speed data acquisition and control including analog inputs, analog outputs, digital inputs, digital outputs, counters, signal conditioning, and CANbus, Flexray,

serial and EtherCAT interfaces. The architecture of the ADwin data acquisition system is optimized to provide precise, deterministic operation boasting usecond response times. A high performance local DSP controller manages the data acquisition hardware and works in cooperation with a PC via a shared memory interface that provides transparent access to data and control variables. In this way the system is partitioned to share the load such that the DSP in the ADwin system controls all time-critical tasks, while the PC is free to handle the user interface, data presentation and data storage.

The ADwin-Pro-II system is freely programmable, using either the ADBasic real-time IDE or alternatively the graphical model-based Simulink® software package from Mathworks®. All ADwin systems are compatible with computers running under Windows, Linux, Mac, or Unix. Driver packages are available for virtually all common PC development tools including VB, VB.NET, C/C++/C#, Java, Phyton, LabVIEW, WinCC, Matlab, Simulink, VEE, DasyLab, and many more.

For further information on the ADwin-Pro-II data acquisition system, other ADwin DAQ solutions, or to find the ideal solution for your application-specific needs, contact a CAS Data Logger Applications Analyst at (800) 956-4437 or visit the website at www.DataLoggerInc.com.