Advantech Device Specific Help

Advantech PCL-711 I/O Cards, V 3.0

The Advantech DLL driver supports the operation of ADVANTECH data acquisition cards and signal conditioning boards. The following table lists the cards and functions supported:

TABLE 1: Advantech DLL Driver Software Support

Hardware Type	DLL Driver	A/D	D/A	DIO	TEMP	COUNTER	ALARM
PCL-711A/S	adPCL711.drv	YES	YES	YES	YES*	NO	NO
PCL-711B	adPCL711.drv	YES	YES	YES	YES*	NO	NO

A/D=ANALOG INPUT, D/A=ANALOG OUTPUT, DIO=DIGITAL I/O,
TEMP=TEMPERATURE MEASUREMENT

* Temperature measurement using the PCLD-789, PCLD-779, PCLD-5B16, or PCLD-770 daughterboards.

All cards listed can be used in an IBM PC or compatible. A series of wiring terminal boards and signal conditioning boards, listed below, are also available for making your applications easier to implement:

* PCLD-770   Signal conditioning board
* PCLD-779   Thermocouple Amplifier/Multiplexer Board
* PCLD-789   Amplifier/Multiplexer Board.
* PCLD-5B16 5B Module Carrier Board
* PCLD-774   Analog Expansion Board
* PCLD-786   AC/DC Power SSR and Relay Driver Board.
* PCLD-7216 SSR I/O Module Carrier Board
* PCLD-7224 SSR I/O Module Carrier Board
* PCLD-785   Relay Output Board.
* PCLD-885   Power Relay Output Board
* PCLD-782   Isolated D/I Board.
* PCLD-7115 Wiring Terminal Board
* PCLD-780   Wiring Terminal Board.
* PCLD-880   Industrial wiring Terminal Board.

I/O CARD FUNCTIONAL DESCRIPTION

PCL-711A/B/S
8 analog inputs
1 analog output
16 digital inputs
16 digital outputs

HARDWARE CONFIGURATION
Before an acquisition board can work properly with the DLL driver software, it must be configured correctly.   You must determine the hardware options (input range(s), I/O address, etc.) which suit your particular requirements.   On all ADVANTECH boards, configuration is a matter of setting jumpers and switches. Read the manual that comes with your ADVANTECH

board in conjunction with this help to determine how to configure the hardware.   All ADVANTECH boards are shipped with factory default settings.   If the default configuration is appropriate for your system, no additional set-up is required.

Configuring the PCL-711A/S and PCL-711B
The following options must be configured before the cards   can be used with the Advantech DLL driver:

* Base Address
* D/A Reference Voltage

Software Gain Setting:
For the PCL-711B, the A/D gain is set directly through the application. For the PCL-711A/S, the gain is fixed at +/- 5V.