



22 Apr. 10
DW200590

BradCommunications™ Direct-Link™ CANopen network interface cards allow deterministic I/O data acquisition for PC-based control applications.

Features

- **New! Support of PCI Express 1x form factor**
- **Automatic devices detection on the network**
- **Connect PC-Based Control applications directly to I/O devices**
- **Protocol: CANopen Master/Scanner**
- **1 Serial or Ethernet port for remote configuration and diagnostic**
- **Embedded Communication on the card for powerful data throughput**
- **Automatic I/O mapping for easy configuration**

OS supported

Standard package

- **Windows 32-bit (XP SP1/ 2000 SP4 / NT SP6, 2003 Server), Ardence RTX**

Free Download

- **Windows XP Embedded, QNX, VxWorks, Linux, Phar Lap ETS, DOS**

Direct-Link™ CANopen

Data acquisition for real time Control appl

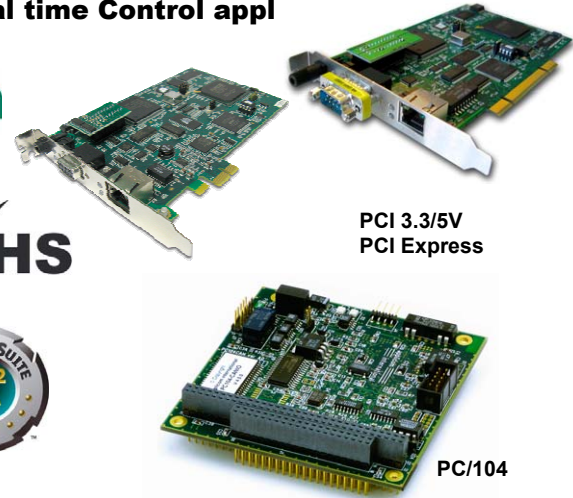
CANopen

activeX

RoHS



PCI 3.3/5V
PCI Express



PC/104

Overview

BradCommunications™ Direct-Link™ is a low range of automation components for industrial communication. It includes a variety of products such as diagnostic tools, intelligent connectors, tunneling gateways, fieldbuses network interface cards, and software drivers for industrial networks.

Simple as they are affordable, BradCommunications™ Direct-Link™ products allow you to acquire the equipment to develop your architectures and industrial applications at a lower cost.

Direct-Link™ products are characterized by their simple use and fast implementation; they are modular and scalable. Moreover, they are designed to be easily embedded into computerized systems and are available in a wide selection of form factors.

Powerful Network Interface card

Particularly, the **BradCommunications™ Direct-Link™ CANopen** interface cards are equipped with 1 CANopen port handling CANopen protocol in **Master mode** up to 1Mbps.

A smart A.D.M (Automatic Dual port ram Mapping) mechanism avoids the I/O tags configuration in the Dual Port RAM of the card. More than a simple I/O acquisition card, the Direct-Link™ PCU-CANIO/PC104-CANIO interfaces provide the applications with additional information such as: *device status and diagnostics, process data read/write monitoring, communication tools for troubleshooting, hardware and software Watchdog, etc..*

The communication layers are completely embedded on the cards, allowing easy and fast communication with field devices resulting in remarkable application performance.

Product package includes:

- Graphical console for configuration and diagnostic tools
- Data servers (Multi-protocol OPC DA 3.0 & 2.05, ActiveX, DAServer, FastDDE/SuiteLink)
- I/O libraries for Windows (DLL) and Ardence's hard real time extensions (RTX)
- Static library for non-windows OS
- Drivers for soft-logic packages

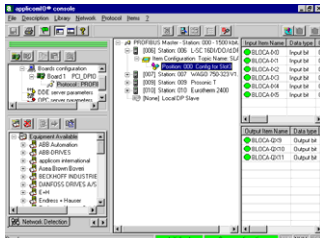
BradCommunications™

Direct-Link™ CANopen

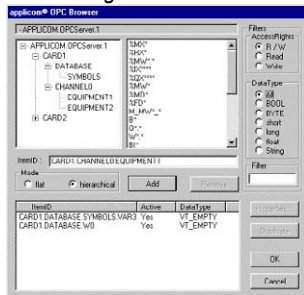


Software tools

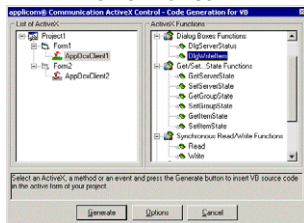
Direct-Link™ Interface cards provide effective software tools enabling fast integration of industrial communication into your applications. The console is common to all fieldbuses of Woodhead offer as Profibus-DP, EtherNet/IP, PROFINET IO, Modbus/TCP and DeviceNet.



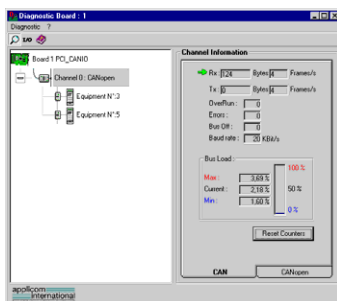
- Configuration console -



- OPC Browser -



- ActiveX implementation -



- Diagnostic and test tools -

Hardware specifications

	PCU-CANIO	PCIE-CANIO	PC104-CANIO
Bus interface	PCI Universal 3.3/5V (PCI-X compatible)	PCI Express 1x	PC/104 bus
Processor	AMD SC520		
Memory	8 Mbytes SDRAM		
Interruption	Hardware Plug&Play		2, 3, 4, 5, 6, 7, 10, 11, 12, 14, 15
DPRAM Address	Hardware Plug&Play (8 Kbytes used per card)		From C8000 to DE000
Dimensions (L x W)	168mm x 107mm		95mm x 90mm
Consumption	6W (max. 1.2A)		5W (max. 0.8A)
Operating Temp.	0°C up to +65° C		0°C up to +65° C
Storage Temp.	-40°C up to +80°C		-40°C up to +85°C
Discrete Input	Opto-coupled discrete input -> DC +10 to +30 or AC 24 V (50 to 60Hz)		
Discrete Output	"WatchDog" output contact free from potential (floating) (24V DC, 0.25 A)		
EMC Compliance	EN55022 Class B, EN61000-6-2, EN61000-3-2, EN61000-3-3		
RoHS Compliance	Yes		

1 CANopen port

Connector type	CANopen Standard, 9-pin Sub-D male (gender changer Sub-D Male/Male supplied)	HE13 (2 x 5 pins)
CAN Controller	Phillips SJA 1000	
CAN Transceiver	Phillips 82C251	
Speed	1, 10, 20, 50, 100, 125, 250, 500, 800, 1000 Kbps	
LED indicators	1 Status LED / 1 transmission LED	

Port for remote configuration and diagnostic

Port Type	Ethernet port	Serial port
Connector type	Base-T - RJ45	HE13 (2 x 5 pins)
LED indicators	4 LEDs - TX/RX/Link/100 Mbps	-
Electrical interface	Ethernet IEEE 802.3	RS232
Speed	10/100 Mbps (auto-negotiation)	50 to 38400 bps

Protocol Specifications

CANopen	Specifications
	<ul style="list-style-type: none"> Specifications CIA DS 301 v4.0, DS302 v4.02 Supported profiles: DSP 401, DSP 402, DSP 403, DSP 404, DSP 406 Connect up to 127 Slave stations Send/Rec of PDO's (3500) and TPDO/RPDO (256/256) PDO modes: Event driven, Sync Cyclic, Sync Acyclic, Async Dynamic PDO mapping Integrated data consistency Direct access to variable types (bit, byte, word, double word) EDS Library

Ordering Information

Part Number	SAP	Product Description
DRL-CNO-PCU	1120210014	BradCommunications™ Direct-Link™ PCU-CANIO CANopen card , PCI-Universal bus, 3.3/5V
DRL-CNO-PCIE	1120865018	BradCommunications™ Direct-Link™ PCIE-CANIO CANopen card , PCI Express 1x
DRL-CNO-104	1120230007	BradCommunications™ Direct-Link™ PC104-CANIO CANopen card, PC/104 bus

To contact us: www.woodhead.com

North America: US: +1 (630) 969-4550 – Canada: +1 519 725 5136
 Europe: France: +33 2 32 96 04 20 – Germany: +49 7252 94 96 0 – Italy: +39 (02) 950551 – UK: +44 (1252) 720720
 Asia: China: +86 21-5048-0889 Singapore: +65 6-268-6868 – Japan: +81 46-265-2325 – Korea: +82 31-492-9000

Brad is a registered trademark and BradControl, BradCommunications, applicom, Direct-Link and SST are trademarks of Molex Incorporated. © 2010 Molex