SST™ Interfaces for DeviceNet

For Controlling and Monitoring DeviceNet Applications

*BradCommunications SST
PCI bus DeviceNet interface*

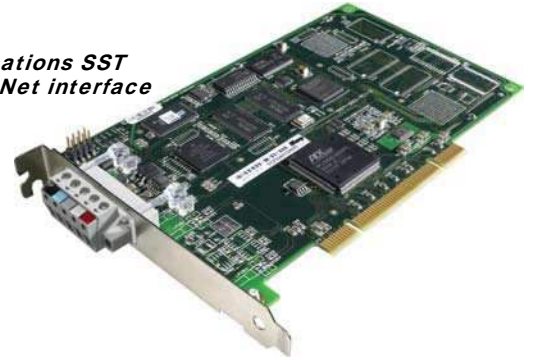**3.3V - 5V PCI-X Universal Bus**

Features

- **High performance - DeviceNet protocol executed on the card**

- **Diagnostic LEDs**

- **UCMM (Unconnected Message Manager) capable; Group 1, 2, and 3 dynamic explicit connections supported**

- **Provides simultaneous execution of Group 2 Client (Master) and Server (Slave) operation**

- **Supports all DeviceNet standard baud rates: 125, 250, and 500 Kbaud**

- **Supports Poll, Strobe, Change of State (COS) and Cyclic I/O messaging**

- **Supports fragmented Explicit and I/O messages**

- **Provides Client (Master) explicit messaging to slave devices**

OS and Drivers Supported

- **Windows 2000 / XP drivers**

- **The Console; a grouping of software tools including OPC server configuration and diagnostic tools**

- **Open, documented memory map interface with example C source code and Windows 32-bit DLLs for custom driver development**

Overview

BradCommunications™ SST™ network interface cards are ideal for applications where high-performance control and reliability are required. Backed by superior support and service, BradCommunications network interfaces support a wide range of network protocols and bus formats.
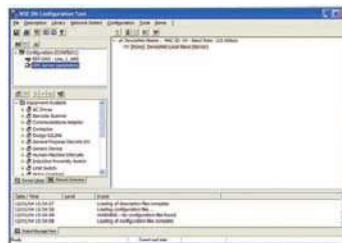
BradCommunications SST network interface cards for DeviceNet can be found in many applications including:
- Operator Interface
- Human-Machine Interface
- PC Control
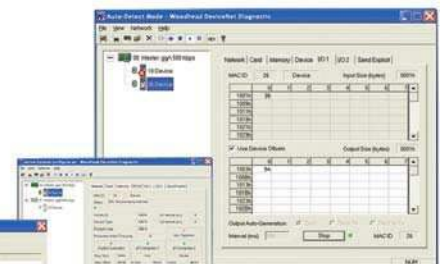- Device Development
- Network Diagnostics

BradCommunications SST network interface cards for DeviceNet undergo DeviceNet conformance testing and support DeviceNet specifications; including all DeviceNet standard baud rates, Poll, Strobe, Change of State (COS) and Cyclic I/O messaging.

Software Tools

Software available for the SST DeviceNet Interface Cards enables fast integration of industrial communication into your application.

Configuration Console

Diagnostic and Test Tools

OPC Browser

ODVA™

Woodhead

BradCommunications™

SST™ DeviceNet Interfaces

Hardware Specifications

	PCI	PC/104
Bus Interface	32-bit, 33 MHz, PCI universal 3.3/5V interface (compliant signaling with PCI v2.2)	16-bit PC/104 interface (compliant with PC/104, spec 2.3)
Processor	66 MHz ColdFire, per channel	
Memory	128 bytes for PCI configuration	256 KB of shared RAM per channel
Diagnostics	Bi-color LEDs showing card status PCI: health, communication PC/104: power, health, communication	
Interrupts	Hardware Plug & Play (32 Kbytes used per card)	Software selectable level IRQ 2/9,5,7,10,11,12,15; standard TTL drive
Dimensions (LxW)	Standard half-length	9.588 cm x 9.017 cm (3.775 in x 3.550 in)
Consumption	5.2 W	5.0 W
Typical Current Draw	+5V, ± 5 % 1.03 A (2 channel)	+5V, ± 5 %, 1000 mA 2 channel
Voltage Requirements	5 V	
Addressing: Memory	A 256 Kbytes window available per channel	256K in a window of 8K, 16K, 32K, 64K, 128K or 256K bytes on even window boundary between 512K and 1Mb
Addressing: I/O	8 bytes allocated per channel	8 bytes on any even 8-bit boundary from 200h-2F8h or 600h-6F8h
Operating Temperature	0º C (32º F) up to +55º C (131º F)	
Storage Temperature	-40º C (-40º F) up to +85 ºC (185º F)	
Humidity	5% to 95% non-condensing	
Network Specifications:		
Protocol	DeviceNet™ Master – Group 2 Client, Group 2 only Client DeviceNet Slave – Group 2 Server CAN 2.0 B Isolated CAN physical layer on each channel	
Cable	Shielded twisted pair, compatible with target network	
Connector	DeviceNet compliant 5-pin CAN connector	
External Power	11-24 VDC, 50 mA typical	
Isolation	500 V	
Data Rate	Up to 1 Mbaud for CAN 125K, 250K and 500K baud for DeviceNet	
RoHS Compliant	Yes	Yes

Ordering Information

SAP Material Number	Catalog Number	Product Description
1120030013	**SST-DN3-PCU-1**	DeviceNet card, Universal PCI bus (3.3V / 5V), 1 channel
1120030018	**SST-DN3-PCU-2**	DeviceNet card, Universal PCI bus (3.3V / 5V), 2 channels
1120050016	**SST-DN3-104-1**	DeviceNet card, PC/104, 1 channel
1120050024	**SST-DN3-104-2**	DeviceNet card, PC/104, 2 channels
Not required	**SST-DN3-DIA**[†]	DeviceNet diagnostic tool
1120300007	**SST-DN3-CNF-U**	DeviceNet software console with USB key (includes network analyzer)
1120300006	**SST-DN3-CNF-P**	DeviceNet software console with parallel port key (includes network analyzer)
1120270014	**SST-DN3-OPC**	OPC Data Server software (must purchase at least one SST- DN3-CNF)

[†] *Included with SST-DN3 interface cards*

Network Interface

Brad® from **molex**

BradCommunications™ SST™ DeviceNet™ Interfaces
provide high-performance control and the support
required for your DeviceNet applications.

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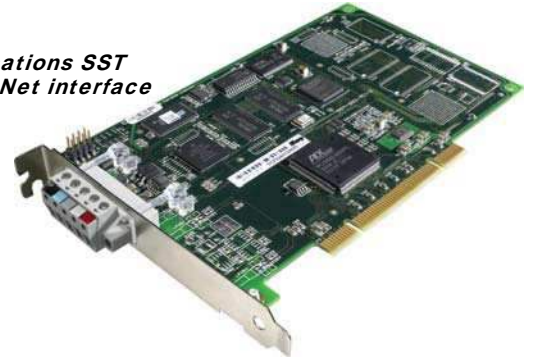**BradCommunications SST
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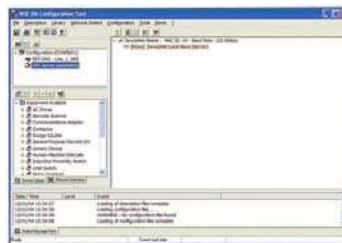
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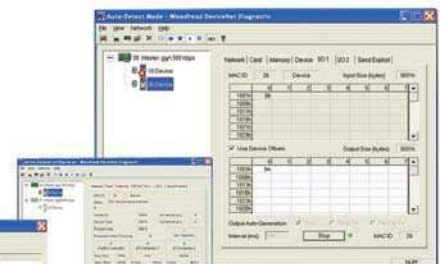- Device Development
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