

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

# SST<sup>™</sup> Interfaces for DeviceNet

For Controlling and Monitoring DeviceNet Applications



# Overview

BradCommunications<sup>™</sup> SST<sup>™</sup> 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.

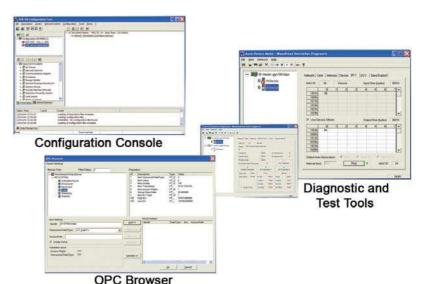
BradCommunications SST network interface cards for DeviceNet can be found in many applications including:

- 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.





- 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





# SST<sup>™</sup> DeviceNet Interfaces



### **Hardware Specifications**

	PCI	PC/104	
Bus Interface	32-bit, 33 MHz, PCI universal 3.3/5V interface	16-bit PC/104 interface	
	(compliant signaling with PCI v2.2)	(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	
Diamagnia	Bi-color LEDs showing card status		
Diagnostics	PCI: health, communication PC/104: power, health, communication		
	Hardware Plug & Play	Software selectable level	
Interrupts	(32 Kbytes used per card)	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	0° C (32° F) up to +55° C (131° F)		
Storage Temperature	-40° C (-40° F) up to +85 °C (185° F)		
Humidity	5% to 95% non-condensing		
Network Specifications:			
	DeviceNet <sup>™</sup> Master – Group 2 Client, Group 2 only Client		
Protocol	DeviceNet Slave – Group 2 Server		
	CAN 2.0 B Isolated CAN physical layer on each channel		
Cable		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 <sup>†</sup>	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)

<sup>†</sup> Included with SST-DN3 interface cards



To contact us: www.woodhead.com

Reference Number: DW2006148 Date Published: December 2008

North America: US: +1 800 225 7724 - Canada: +1 519 725 5136 Europe: France: +33 2 32 96 04 20 - Germany: +49 7252 94 96 0- Italy: +39 010 59 30 77 -

Asia:

United Kingdom: +44 1495 356300 Shanghai, China: +86 21-5835-9885 - Tianjin, China: +86 22-23321717 Singapore: +65 6268-6868 – Yamato, Japan: +81 46-265-2428 – Nagoya, Japan: +81 52-221-5950



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

# SST<sup>™</sup> Interfaces for DeviceNet

For Controlling and Monitoring DeviceNet Applications



# Overview

BradCommunications<sup>™</sup> SST<sup>™</sup> 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.

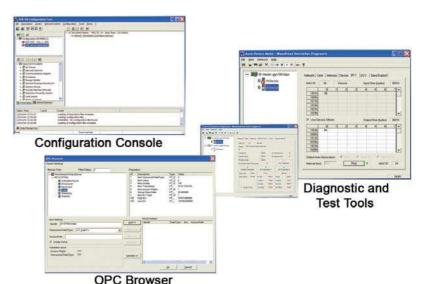
BradCommunications SST network interface cards for DeviceNet can be found in many applications including:

- 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.





- 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





# SST<sup>™</sup> DeviceNet Interfaces



### **Hardware Specifications**

	PCI	PC/104	
Bus Interface	32-bit, 33 MHz, PCI universal 3.3/5V interface	16-bit PC/104 interface	
	(compliant signaling with PCI v2.2)	(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	
Diamagnia	Bi-color LEDs showing card status		
Diagnostics	PCI: health, communication PC/104: power, health, communication		
	Hardware Plug & Play	Software selectable level	
Interrupts	(32 Kbytes used per card)	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	0° C (32° F) up to +55° C (131° F)		
Storage Temperature	-40° C (-40° F) up to +85 °C (185° F)		
Humidity	5% to 95% non-condensing		
Network Specifications:			
	DeviceNet <sup>™</sup> Master – Group 2 Client, Group 2 only Client		
Protocol	DeviceNet Slave – Group 2 Server		
	CAN 2.0 B Isolated CAN physical layer on each channel		
Cable		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 <sup>†</sup>	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)

<sup>†</sup> Included with SST-DN3 interface cards



To contact us: www.woodhead.com

Reference Number: DW2006148 Date Published: December 2008

North America: US: +1 800 225 7724 - Canada: +1 519 725 5136 Europe: France: +33 2 32 96 04 20 - Germany: +49 7252 94 96 0- Italy: +39 010 59 30 77 -

Asia:

United Kingdom: +44 1495 356300 Shanghai, China: +86 21-5835-9885 - Tianjin, China: +86 22-23321717 Singapore: +65 6268-6868 – Yamato, Japan: +81 46-265-2428 – Nagoya, Japan: +81 52-221-5950