

The BradCommunications[™] SST[™] PROFIBUS[®] scanner connects your Allen-Bradley[®] SLC[™] 5/03 or higher controller to PROFIBUS DP.

30 Oct. 09 DW2006134

Features

• Enhanced design!

- 100% backward compatible with previous generation (SST-PFB-SLC)
- Manages DP-V1 Services including SLC ladder logic samples
- Doubling of M0 and M1 data area up to 1000 words
- Module can "Set Slave" address
- PROFIBUS DP Master Configuration Software
- Supports all PROFIBUS baud rates including 31.25 and 45.45 kbps
- Simultaneous operation of PROFIBUS DP Master and Slave
- Flash memory for storage of DP Master I/O configuration
- Fast, easy set up into SLC backplane, PROFIBUS I/O data is automatically mapped into the SLC's processor's I, O files and into MO and MI files residing on PB3-SLC
- Supports exported configuration files from the SST DP configuration software and Siemens COM PROFIBUS
- Multiple SST-PB3-SLC modules can be used in one SLC rack

Protocols

- PROFIBUS DP-V0 Master Class 1&2
- PROFIBUS DP-V1 Master Class 1&2
- PROFIBUS DP-V0 Slave

Typical Applications

- Packaging machinery
- Conveyor & handling systems
- Food products machinery

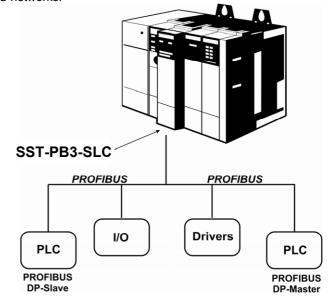


For the Allen-Bradley SLC 500 Controller



Overview

The BradCommunications SST PROFIBUS scanner connects your Allen-Bradley SLC 5/03 or higher controller to PROFIBUS as a master or slave to scan or emulate PROFIBUS DP I/O. With the new user-defined data space of 2064 Bytes Input and 2064 Bytes Output, the BradCommunications[™] SST[™] Profibus module provides a cost efficient solution to connect the SLC CPU with large PROFIBUS networks.



A 9-pin serial port included on the scanner provides for firmware upgrades in the field and the upload of I/O configurations.

The SLC's processor logic scan and the PROFIBUS I/O scan are independent of each other. The SLC processor reads the scanner input data during its input scan and writes the output data during its output scan. The scanner reads input data from the slaves and writes output data to the slaves independent of what the SLC is doing. Slave status, diagnostic status information on all slaves, network diagnostic counters and DP Master diagnostic counters are maintained by the scanner. The scanner does not require the set up of a G-file in the SLC.

Woodhead

BradCommunications[™]

PROFIBUS® DP Scanner



Diagnostic & Software Tools

Configuration Software

 Browse your DP network for slave devices you want to include in your DP Master configuration using the DPView component

Scanner Software

- Maintains slave status, diagnostic status information on all slaves, network diagnostic counters, and DP Master diagnostic counters
- Maintains network and I/O module status information including:
 - DP Master Slave status table
 - Network diagnostic counters
 - DP Master diagnostic counters

Diagnostic LEDs

• COMM and SYS LEDs provide immediate notification of network and system errors

Other PROFIBUS Products

- PROFIBUS modules for Allen-Bradley[®] ControlLogix[®]
- PROFIBUS network interface cards (USB, PCI, CompactPCI, PC/104, ISA, VME64) with many user interfaces (DLL, OPC, ActiveX...)
- PROFIBUS gateways to Serial and Ethernet networks
- IP67 PROFIBUS I/O modules (M8/M12 connectors)
- Full metal PROFIBUS connector
- Cable, cordsets, receptacles

Network Specifications

| Protocol • PROFIBUS DP-V0 Master, class 1&2 • PROFIBUS DP-V1 Master, class 1&2 • PROFIBUS DP-V0 Slave (up to 122 words of input data and 122 words of output data as slave) LAN Controller • Siemens ASPC2 Slaves Supported • Maximum of 125 I/O per Slave • Maximum of 244 bytes in/out I and O files: 32 words input + 32 words output • N1 and M0 files: 1000 words input + 1000 words output (128 words in / out if configuring with COM PROFIBUS) • Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created Data Rate • 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M Cable • Belden 3079A • DB9 female connector • DB9 female connector | | | |
|--|------------------|---|--|
| Protocol • PROFIBUS DP-V0 Slave (up to 122 words of input data and 122 words of output data as slave) LAN Controller • Siemens ASPC2 Slaves Supported • Maximum of 125 I/O per Slave • Maximum of 244 bytes in/out I/O per Slave • Maximum of 244 bytes in/out I/O per Slave • Maximum of 244 bytes in/out I/O Mapping (for SLC [™]) • I and O files: 32 words input + 32 words output • I and O files: 1000 words input + 1000 words output (128 words in / out if configuring with COM PROFIBUS) • Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created Data Rate • 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M • Belden 3079A • • Belden 3079A • • BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | Protocol | PROFIBUS DP-V0 Master, class 1&2 | |
| PROFIBUS DP-V0 Slave (up to 122 words of input data and 122 words of output data as slave) LAN Controller Siemens ASPC2 Slaves Supported Maximum of 125 I/O per Slave Maximum of 244 bytes in/out I and O files: 32 words input + 32 words output M1 and M0 files: 1000 words input + 1000 words output (128 words in / out if configuring with COM PROFIBUS) Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created Data Rate 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M Belden 3079A BradConnectivity[™] Brad Harrison[®] 85-0001 PVR2 conductor with shield, UL-listed | | PROFIBUS DP-V1 Master, class 1&2 | |
| LAN Controller • Siemens ASPC2 Slaves Supported • Maximum of 125 I/O per Slave • Maximum of 244 bytes in/out I and O files: 32 words input + 32 words output • I and O files: 32 words input + 32 words output • M1 and M0 files: 1000 words input + 1000 words output (128 words in / out if configuring with COM PROFIBUS) • Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created Data Rate • 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M • Belden 3079A • BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | | | |
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| I/O per Slave Maximum of 244 bytes in/out I and O files: 32 words input + 32 words output I/O Mapping (for SLC [™]) I and O files: 32 words input + 32 words output Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created Data Rate 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M Belden 3079A BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | LAN Controller | Siemens ASPC2 | |
| I/O Mapping (for SLC [™]) I and O files: 32 words input + 32 words output M1 and M0 files: 1000 words input + 1000 words output (128 words in / out if configuring with COM PROFIBUS) Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created Data Rate 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M Belden 3079A BradConnectivity[™] Brad Harrison[®] 85-0001 PVR2 conductor with shield, UL-listed | Slaves Supported | Supported • Maximum of 125 | |
| I/O Mapping (for SLC [™]) • M1 and M0 files: 1000 words input + 1000 words output (128 words in / out if configuring with COM PROFIBUS) • Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created • 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M • Belden 3079A • BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | I/O per Slave | Maximum of 244 bytes in/out | |
| I/O Mapping (for SLC [™]) output (128 words in / out if configuring with COM PROFIBUS) Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created Data Rate 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M Belden 3079A Belden 3079A PROFIBUS) BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | | I and O files: 32 words input + 32 words output | |
| I/O Mapping (for SLC [™]) PROFIBUS) • Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created Data Rate • 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M Cable • Belden 3079A • BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | | M1 and M0 files: 1000 words input + 1000 words | |
| (for SLC™) PROFIBUS) • Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created Data Rate • 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M Cable • Belden 3079A • BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | | output (128 words in / out if configuring with COM | |
| • Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created • 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M • Belden 3079A • BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | | PROFIBUS) | |
| the configuration created Data Rate 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M Cable • Belden 3079A • BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | (101 020) | | |
| Data Rate 9600, 19200, 31.25k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M Cable Belden 3079A BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | | | |
| Data Rate 1.5M, 3M, 6M, 12M • Belden 3079A • BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | | the configuration created | |
| 1.5M, 3M, 6M, 12M • Belden 3079A • BradConnectivity [™] Brad Harrison [®] 85-0001 • PVR2 conductor with shield, UL-listed | Data Rate | | |
| • BradConnectivity [™] Brad Harrison [®] 85-0001 PVR2 conductor with shield, UL-listed | | 1.5M, 3M, 6M, 12M | |
| PVR2 conductor with shield, UL-listed | | | |
| | Cable | | |
| Connector DB9 female connector | | PVR2 conductor with shield, UL-listed | |
| | Connector | DB9 female connector | |

Hardware Specifications

| Processors Protocol processor: Freescale Coldfire MCF5272 Backplane processor: Altera Cyclone II • 2 MB of local Coldfire SDRAM • 32 MB of local NIOS DDR • 512 KB of onboard shared memory • 512 KB of sectored flash memory • 512 KB of program and configuration data Two LEDs indicate: 1. health of the PROFIBUS network (COMM) | | | | |
|---|---------------------|--|--|--|
| Processors Backplane processor: Altera Cyclone II • 2 MB of local Coldfire SDRAM • 32 MB of local NIOS DDR • 512 KB of onboard shared memory • 512 KB of sectored flash memory • 512 KB of program and configuration data Two LEDs indicate: 1. health of the PROFIBUS network (COMM) | Bus Interface | Allen-Bradley [®] SLC [™] 5/03 or higher | | |
| Memory • 2 MB of local Coldfire SDRAM • 32 MB of local NIOS DDR • 512 KB of onboard shared memory • 512 KB of sectored flash memory • 512 KB of sectored flash memory • 512 KB of sectored flash memory • 10 LEDs indicate: 1. health of the PROFIBUS network (COMM) | Processors | Protocol processor: Freescale Coldfire MCF5272 | | |
| Memory • 32 MB of local NIOS DDR • 512 KB of onboard shared memory • 512 KB of sectored flash memory • 512 KB of program and configuration data Two LEDs indicate: 1. health of the PROFIBUS network (COMM) | | Backplane processor: Altera Cyclone II | | |
| Memory • 512 KB of onboard shared memory • 512 KB of sectored flash memory • 512 KB of sectored flash memory for storage of program and configuration data Two LEDs indicate: 1. health of the PROFIBUS network (COMM) | | 2 MB of local Coldfire SDRAM | | |
| • 512 KB of sectored flash memory for storage of program and configuration data Two LEDs indicate: 1. health of the PROFIBUS network (COMM) | | 32 MB of local NIOS DDR | | |
| for storage of program and configuration data Two LEDs indicate: 1. health of the PROFIBUS network (COMM) | Memory | 512 KB of onboard shared memory | | |
| Diagnostics Two LEDs indicate: 1. health of the PROFIBUS network (COMM) | | 512 KB of sectored flash memory | | |
| Diagnostics 1. health of the PROFIBUS network (COMM) | | for storage of program and configuration data | | |
| | Diagnostics | Two LEDs indicate: | | |
| 2 communication status with PROFIBUS slaves (SYS) | | health of the PROFIBUS network (COMM) | | |
| | | 2. communication status with PROFIBUS slaves (SYS) | | |
| Backplane 750mA @ 5V from a supply delivering Separated Extra | Backplane | 750mA @ 5V from a supply delivering Separated Extra | | |
| Current Consumption Low Voltage (SELV) | Current Consumption | Low Voltage (SELV) | | |
| Operating T° 0°C (32°F) up to +50°C (122°F) | Operating T° | | | |
| Storage T° -40°C (-40°F) up to +85°C (185°F) | Storage T° | -40°C (-40°F) up to +85°C (185°F) | | |
| Relative Humidity 5% to 95% non-condensing | Relative Humidity | 5% to 95% non-condensing | | |
| Bollution dogree 1 - no pollution, or only non-conductive or non- | Pollution degree | Degree 1 - no pollution, or only non-conductive or non- | | |
| corrosive pollution | | corrosive pollution | | |
| RoHS Compliant Yes | RoHS Compliant | Yes | | |

Ordering Information

| Part Number | SAP | Description |
|-------------|------------|--|
| SST-PB3-SLC | 1120160022 | BradCommunications™ SST™ PROFIBUS Scanner for Allen-Bradley SLC 500 |

Other related products:

| Daut Namels au | 0.4.D | |
|-----------------|------------|--|
| Part Number | SAP | Description |
| SST-PB3-CLX-RLL | 1120160018 | BradCommunications [™] SST [™] PROFIBUS Scanner for Allen-Bradley ControlLogix |
| SST-PB3-CLX-DTM | | BradCommunications [™] SST [™] PROFIBUS Scanner for Allen-Bradley ControlLogix and CommDTM driver |



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