Conveyor and handling systems

Food and Beverage

Maximise network flexibility with SST™ Communication Modules for rapid connection of Rockwell SLC 500 systems to PROFIBUS networks

The SST™ Communication Module connects Rockwell SLC 500 PLCs as a Master or Slave to scan or emulate PROFIBUS DP I/O. With the user-defined data space of 2064 bytes Input and 2064 bytes Output, the SST™ Profibus module provides a cost-efficient solution to connect SLC CPUs with large PROFIBUS networks.

A 9-pin serial port included on the scanner allows 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. For more information visit: www.molex.com/link/sstcommunicationmodules.html

Features and Benefits

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
PROFIBUS DP Master Configuration Software
Supports all PROFIBUS baud rates
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

Applications

Factory automation and process control:
Consumer and packaged goods
Conveyor and handling systems
Food and Beverage
Automotive
Wastewater treatment
Oil and Gas
Pharmaceutical

Food and Beverage
Conveyor and handling systems
Specifications

NETWORK SPECIFICATIONS
Compatible Protocols:
- PROFIBUS DP-V0 Master, class 1&2
- PROFIBUS DP-V1 Master, class 1&2
- PROFIBUS DP-V0 Slave (up to 122 words input data & 122 words output data)
LAN Controller: Siemens ASPC2
Slaves Supported: Maximum of 125
I/O per Slave: Maximum of 244 bytes in/out
I/O Mapping (for SLC™):
  I and O files: 32 words in/out
  M1 and M0 files: 1000 words in/out
  Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created
Baud Rate: 9.6 Kbps up to 12 Mbps
Connector: DB9 female, Galvanic insulation 1000V

HARDWARE SPECIFICATIONS
Bus Interface: Rockwell SLC™
Processors: Protocol processor: Freescale Coldfire MCF5272
Backplane processor: Altera Cyclone II
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 for storage of program and configuration data
Diagnostics:
  Two LEDs indicate:
    Health of the PROFIBUS network (COMM)
    Communication status with PROFIBUS slaves (SYS)
Backplane Current Consumption:
  750mA @ 5V from a supply delivering Separated Extra Low Voltage (SELV)
Operating Temp: 0 up to +50°C
Storage Temp: -40 up to +85°C
Relative Humidity: 5 to 95% non-condensing
Pollution Degree: Degree 1 - no pollution, or only non-conductive or non-corrosive pollution
Conformance:
  RoHS compliant
  CE

DIAGNOSTIC & SOFTWARE TOOLS
Configuration Software
Browse a DP network for Slave devices to include in 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

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Engineering Number</th>
<th>Protocol</th>
<th>PLC Supported</th>
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<tbody>
<tr>
<td>112016-0022</td>
<td>SST-PB3-SLC</td>
<td>PROFIBUS-DP</td>
<td>Rockwell SLC 500</td>
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</tbody>
</table>

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