



Maximise network flexibility with SST™ Communication Modules for rapid connection of Rockwell ControlLogix systems to Modbus Serial networks

SST™ communication modules for Rockwell ControlLogix systems are the perfect choice for a wide range of applications including factory automation, process control and complex machines.

Each SR4 module has 4x Modbus serial communication channels that act independently and are electrically isolated from each other to perform powerful data exchange with industrial devices such as Modbus Masters or Slaves.

Time-saving configuration and diagnostics can be achieved using the console software connected remotely via EtherNet/IP or RSLinx. Each module is delivered with its custom Add-On-Profile (AOP) for easy integration into the RSLogix 5000 software. The I/O data transfer between the module and the ControlLogix CPU (processor) supports 2 modes: a "Direct Mode" for sharing up to 248 Input words + 248 Output words without ladder logic, or a "Paging Mode" for sharing up to 32,000 I/O words.

CLXT modules withstand high-temperatures and perform in harsh, corrosive environments to meet a wider range of customer application demands. For additional information visit: www.molex.com/link/sstcommunicationmodules.html

Features and Benefits

Fully integrated into Rockwell *Integrated Architecture Builder™* and *ProposalWorks™*

Quickly configure a system and create a bill of materials

More communications channels and protocols supported on a single module compared to the competition

Reduces number of modules required; saves space in the backplane and lowers system costs

Direct I/O mapping; no ladder logic to write

Reduces programming time by over 90%; user trials shown time is cut from days to hours

I/O data refresh every PLC cycle, up to 255 Read/Write Cyclic access per channel

Improves performance; faster system response and enhanced productivity

New user-friendly configuration tool with visual cyclic function screen

Simplifies user training and commissioning; easy configuration

Software package with advanced visual diagnostic tools included

Easy troubleshooting

Share up to 32K words of I/O process data with a Rockwell CPU using a single module

No need to use multiple cards in large applications

Independent, electrically isolated Serial channels

Improves reliability; prevents noise transfer to other channels

Each port can be set-up as Modbus Master or Slave

Provides extreme flexibility and can reduce system costs

CLXT modules feature wider temperature ranges and conformal coated, harsh-duty components

Use with Rockwell ControlLogix XT PLCs Designed to operate in harsh, corrosive environments

Brad® SST™ Communication Modules for Rockwell ControlLogix

112078 Modbus Serial connectivity



SST™ Modbus Serial Communication Module
112078-0001
4 Serial Ports



CLXT Modbus Serial Communication Module
112078-0003

Applications

Factory automation and process control:

Oil and gas plants
 Oil drilling rigs
 Water, wastewater treatment
 Pharmaceutical
 Food and beverage
 Consumer and packaged goods
 Fibers and textiles
 Automotive
 Steel
 Mining, minerals and cement
 Chemical, petrochemical
 Marine
 Military



Automotive production lines



Food and beverage

Brad® SST™ Communication Modules for Rockwell ControlLogix



Water, wastewater treatment



Oil and gas, chemical and petrochemical Plants

Specifications

Hardware

BUS INTERFACE

Rockwell Allen-Bradley 1756
 ControlLogix
 Support multiple modules in a chassis
 Local and remote rack

MEMORY

128 MB of onboard memory
 8 MB of flash memory (user
 configuration data and firmware)

DIAGNOSTICS

4 characters display
 3 LED indicators:
 1 - health of the network (COMM)
 2 - communication status (SYS)
 3 - initialization complete and
 module is ok (OK)

USB PORT

Type A, USB 2 and 1.1 compatible
 User configuration boot
 Module firmware upgrade

CURRENT CONSUMPTION

850 mA @ 5V or 1.75 mA @ 24V

OPERATING TEMP

0 up to +60°C

STORAGE TEMP

-40 up to +85°C

REGULATORY APPROVALS

CE, FM Approved C,US
 Class 1 Div 2 – UL 1604
 RoHS

CONFIGURATION/ DIAGNOSTICS

Windows-based software tools
 OS Supported: Windows XP,
 7 (32, 64-bit), Vista, 8 (32, 64-bit)
 Module USB port
 (configuration only)

Network

PORT

4 x Serial ports

SPEED

110 to 115200 bps

PARITY

None, even, and odd

DATA BITS

5, 6, 7, or 8

STOP BITS

1 or 2

CONNECTOR

RJ45 (DB9 male supplied cable)

ELEC. INTERFACE

RS232 and RS485, 500V galvanic
 insulation

PROTOCOL

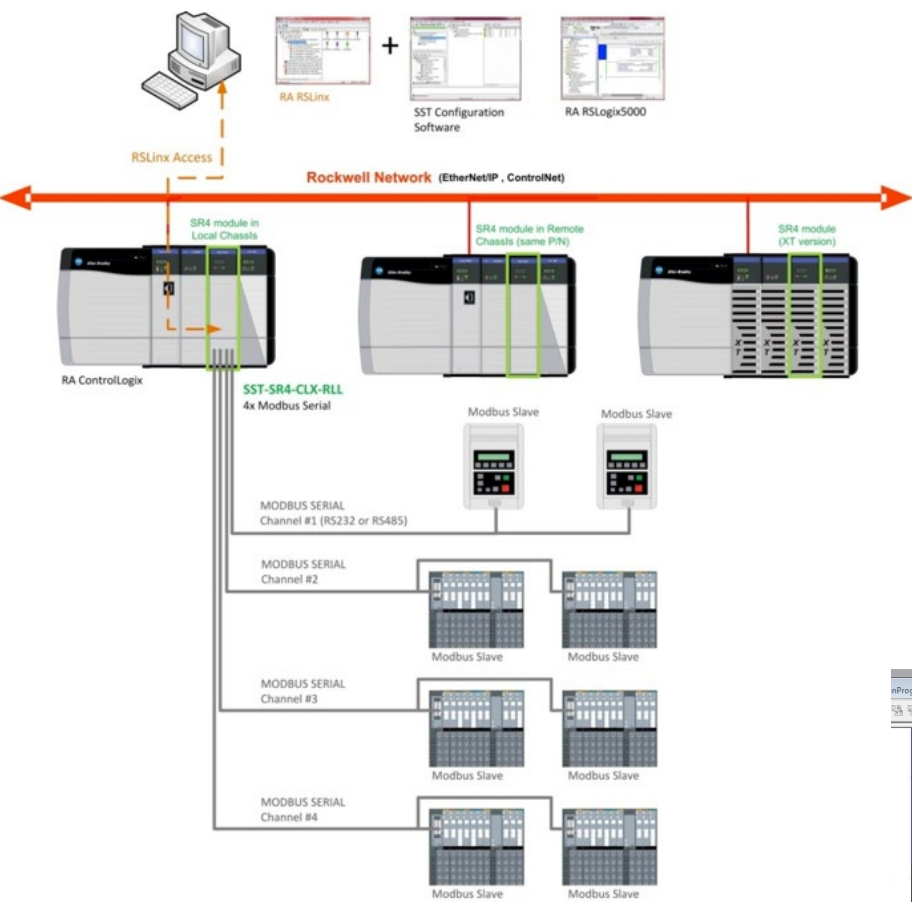
Master

RTU or ASCII Mode
 Maximum slave: 127 slaves
 Function code: 0, 1, 2, 3, 4, 5, 6, 15, 16
 Data format: Intel® / Motorola®

Slave

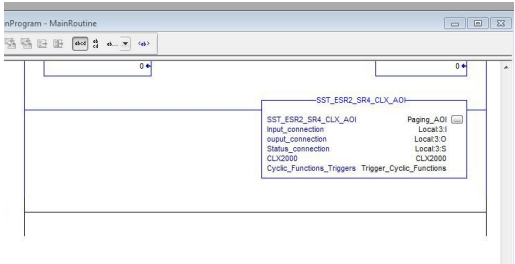
RTU or ASCII Mode
 32K words / 32K bits shared
 memory devices
 Function Code: 0, 1, 3, 5, 6, 15, 16

Typical System Architecture

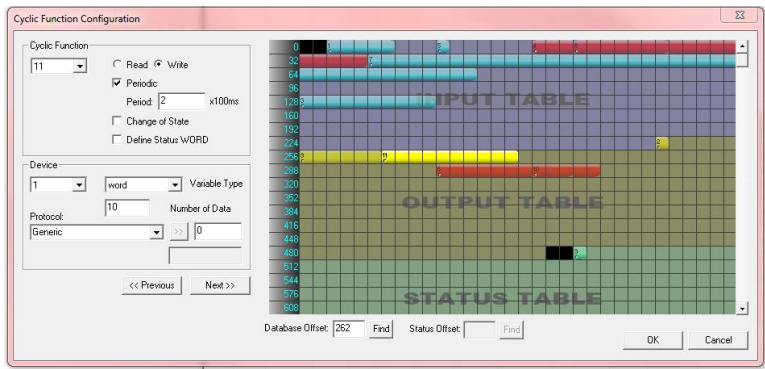


**Brad® SST™
Communication
Modules for Rockwell
ControlLogix**

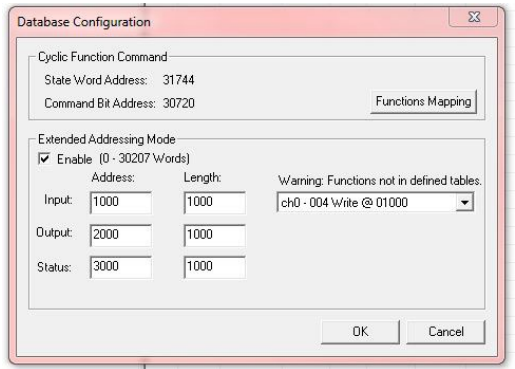
Additional Product Information



Simple to transfer data with Add-On Instructions



Visual Cyclic Function Configuration screen showing data-overlapping errors, data mapping, table areas and message details



Flexible Database Configuration options

Ordering Information

| Order No. | Engineering No. | Serial Ports | PLC Supported | Product Attributes |
|-------------|--------------------|--------------|--------------------------|---|
| 112078-0001 | SST-SR4-CLX-RLL | 4 | Rockwell ControlLogix | Remote Link Library (RLL) feature |
| 112078-0002 | SST-SR4-CLX-RLL-CC | | | Remote Link Library (RLL) feature Conformal Coated |
| 112078-0003 | SST-SR4-CLXT-RLL | | Rockwell ControlLogix XT | Remote Link Library (RLL) feature Conformal Coated CLXT module components |