

SPI Serial Master Driver

Information Sheet for Crimson v3.0+

Compatible Devices

Devices supporting the SPI serial protocol.

Verified Device

Advantage Sentra HE Series

Overview

The SPI Serial Master driver is designed to communicate with a variety of SPI tributary stations. Please review the following to achieve successful communications.

Device Configuration

Please specify the Device ID Code within the device configuration of Crimson 3. This value should be defined in the tributary stations documentation.

Also configure the Device Address of the tributary station. This value should be specified in its raw value as the tributary station expects to receive it, ranging from 0x20 to 0xFF.

Accessing Data

Please select the Data Item according to the size of the data in the tributary station: SPIL for 32-bit data, SPIW for 16-bit data and SPIB for 8-bit data.

Two fields consistent with the SPI protocol specification CMD1 and CMD2 are provided to specify each register address.

Data control is achieved by specifying the appropriate access within the Data tab of the each tags properties. For registers that should have read and write access, bit 0 of CMD2 will be set according to the current operation so that a single tag can be used for read/write operations.

SPI Blanket Polls are not supported.

Cable Information

G3 RS485 Port	Advantage Sentra HE RS485 (DB9)
1 - TxA	4 – TD+/RD+
2 - TxB	5 – TD-/RD-
6 - Ground	1 - Common

Revision History

11/15/10 - Created