Promira Serial Platform Quick Start Guide

Introduction

These getting started guidelines are intended to facilitate the first use of the Promira Serial Platform with I2C/SPI Active - Level 1 application. The Promira platform can be used with Control Center Serial or the Promira API to communicate with any standard I2C/SPI device. Use the Promira platform with Control Center Serial, and follow the instructions below to communicate with a standard I2C/SPI device.

All current downloads for the Promira platform can be found on the product page downloads.

Getting Started Guidelines

- 1. Connect the Promira platform to the PC via the USB connector.
- 2. Follow the instructions in <u>Section 3.2 Connectivity</u> of the Promira platform user Manual to configure the Ethernet over USB interface.
- 3. <u>Download</u> and unzip the latest version of Control Center Serial that supports the Promira platform. (?)
- 4. Launch Control Center Serial. (?)
- 5. Connect Control Center Serial to the Promira platform. (?)
 - 1. Click Adapter.
 - 2. Click Connect.
 - 3. Select the adapter.
 - 4. Click OK to connect to the adapter.
- 6. Connect the Promira adapter Provided Cable 10x34 or 34x34 to the target system. (?)
 - If you have the Beagle I2C/SPI Host analyzer and the I2C/SPI Activity Board, then
 you can use these tools to setup a target system to test the capabilities of the
 devices. For additional information, take a look at the Beagle analyzer user manual
 and the I2C/SPI activity board user manual.
- 7. The Promira platform is capable of communicating with I2C or SPI traffic in Master or Slave mode. Depending on the system requirements, configure the device accordingly. (?)
 - 1. Click Adapter, and choose I2C+SPI.
 - 2. Optionally, click Adapter, and enable I2C Pulls-Ups. (?)
 - 3. Click Adapter, and configure Target Power (pin 4, 6), Target Power (pin 22, 24), and Level Shift. (?)
 - 4. Configure the Device Settings for I2C-Master using the I2C Control panel. (?)
 - 1. Configure the Bitrate.
 - 2. Click on the Master tab.
 - 3. Supply the 7-bit I2C Slave Address. (?)
 - 4. Optionally, configure 10 Bit Addr, No Stop, Message, Number of Data Bytes, Register Address, Address Width, and Number of Data Bytes based on the parameters of the target system.
 - 5. Click Master Write, Master Read, or Master Reister Read based on the target system application.
 - 5. Configure the Device Settings for I2C-Slave using the I2C Control panel. (?)
 - 1. Configure the Bitrate.
 - 2. Click on the Slave tab.
 - 3. Supply the 7-bit I2C Slave Address.
 - 4. Optionally, configure Max Tx Bytes, Max Rx bytes, and Slave Response Message based on the parameters of the target system.
 - 5. Click Set Resp. for setting a slave response.
 - 6. Click Enable to activate the adapter as an I2C slave.

- 6. Configure the Device Settings for SPI-Master using the SPI Control panel. (?)
 - 1. Configure the Bitrate.
 - 2. Click on the Master tab.
 - 3. Configure the Polarity, Phase, Bit Order, SS Polarity, and MOSI Message based on the parameters of the target system.
 - 4. Click Send for transfering the MOSI and MISO messages on the SPI bus.
- 7. Configure the Device Settings for SPI-Slave using the SPI Control panel. (?)
 - 1. Configure the Bitrate.
 - 2. Click on the Slave tab.
 - 3. Configure the Polarity, Phase, Bit Order, and MISO Message based on the parameters of the target system.
 - 4. Click Set MISO message for setting a slave response.
 - 5. Click Enable to activate the adapter as an SPI slave.
- 8. Monitor the transactions in the Transaction Log.

Notes

For additional information, take a look at the <u>Promira platform user manual</u>, and <u>Control Center Serial</u> user manual.