Visual C# Serial Communication

Overview
This simple program, initializes the COM port and sends a Move Relative, Time Based (MRT) command to the attached QuickSilver Device. The device’s response is received and displayed.

It is assumed the reader is familiar with Windows, Visual C#, QuickControl®, programming QuickSilver products, and QuickSilver’s serial communication. For more information see:

- QCI-TD053 Serial Communications
- SilverLode User Manual

This document is meant to explain the setup and general design of the example. The details concerning communicating with a QuickSilver device are left up to the documents mentioned above and the source code comments.

This example was created using Visual C# 2008 Express which is offered free from Microsoft.

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Setup
The following assumptions are made about the setup:
- The device has already been initialized (using QuickControl) and connected to COM 1.
- 8 Bit Protocol
- 57600 Baud Rate
- Unit ID of 16
Supplied Files

<table>
<thead>
<tr>
<th>File/Folder</th>
<th>Description</th>
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<tbody>
<tr>
<td>CommTest</td>
<td>Visual C# Project Folder</td>
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Application Overview

Dialog Box
Pressing the ‘Test’ button will send an MRT command. Responses are displayed in the text box.

SerialPort class
This example uses the SerialPort class supplied with Visual C#.

You can add this control to your project by selecting Toolbox->Components->SerialPort and dragging it onto your project.
Form1.cs
This is the main class for the dialog box. It contains the code that enables us to communicate with the device.

The COM1 is setup in Form1_Load when the form first loads.

When the ‘Test’ button is pressed, CmdTest_Click transmits the MRT command and appends the string to textBox1.

The event handler serialPort1_DataReceived is called when data is received. The handler appends the received data to textBox1.