.net Client For The SUMP LA Protocol -- User Guide

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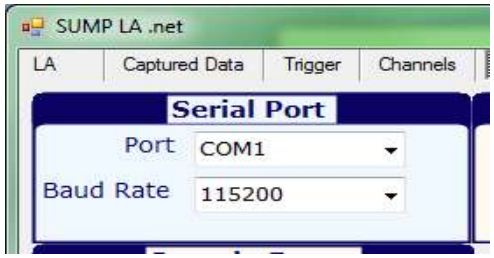
1. **Configuration**

The program has several tabs for the different operations of the logic analyzer:

Start with the configuration tab and set up the com port used to communicate with the hardware.



The save and load buttons allow to save several different configurations and recall them later.

The Capture Rates table defines the available capture rates for the hardware used. You may add or remove values, the result is reflected on the main LA page: (the default ones are the rates supported by the Java Client)

2. **Channels**

On this tab you define the channel groups to capture, and set up individual channel label and visibility. The visibility checkmark does not affect the capture of the channel, rather if it is displayed on the screen.

3. **Trigger**

This is similar to the java client, except all trigger levels are visible at the same time.

4. **LA Operation**

The Run Control area has the capture setting controls. These are similar to the Java Client.

LA Display: Click the demo button to load a demo capture:

-Markers operation:

This system has 2 markers, named T0 and T1. Set a marker by clicking the left button (sets T0, gold triangle) Click again (or right click) to set T1 (white triangle). When markers are set, measurement values appear on top. These can be toggled to frequency or time mode by clicking the frequency button.

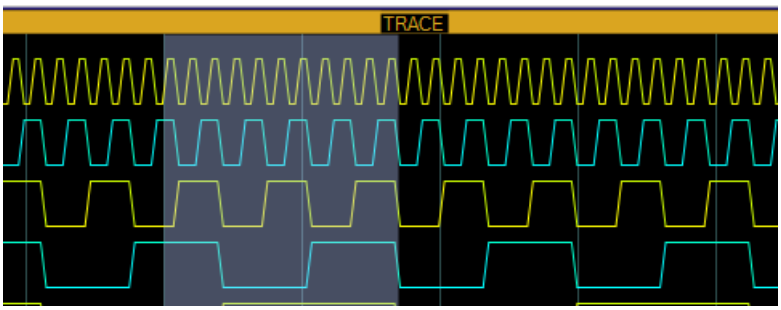
The Snap button snaps the marker to a transition when the marker is set or moved. You can move markers by dragging the triangle handle on top of the screen.

The find button attempts to bring T0 inside the viewed area, the Clear button turns the markers off.

The mS,uS and nS buttons controls how time displays for the markers, as well as the divisions interval display.

Divisions are faint vertical lines on the display. Their interval represents the number in the division field, starting at capture time 0. On the picture above, the divisions are spaced every 250 nS.

Zooming can be performed by increasing decreasing the value in the zoom field or by using the mouse to define an area to zoom into:



Click the left button on the area start and drag to the end of the area. Gray shading is applied.

Release mouse and click inside the gray area to zoom. Clicking outside that area will cancel the operation.

Once zoomed in, you can scroll horizontally with the track bar at the bottom of the display.

5. **Captured Data:** Once a capture is displayed, you can also view the capture points in tabular format:

The Raw button shows the data as it was sent from the hardware, the Transitions button shows only the data points where a change occurred.

6.Flying tabs: Each of the tab pages can 'fly out'. At the bottom right of the tab there is this button:

Click on it and the tab page becomes its own window, displayed side by side with the other. Close the window to bring it back to the main program.

Acknowledgnments:

In writing this software, I used two components I downloaded from the internet:

-Pull apart Tab Pages written by Mark Newman:http://www.codeproject.com/KB/miscctrl/pullaparttabpage.aspx

-Round Button from Gary Perkins: http://www.codeproject.com/KB/buttons/RoundButton.aspx