Icarus Simulator
helloworld simulation
repo 102121icozip
10/09/23

The helloworld_tb.v needs to be created. See catboard-relook/doc/iverilog/helloworld_tb.v

devel@pi4-20:~ $ cd 102121icozip/rtl/uart/

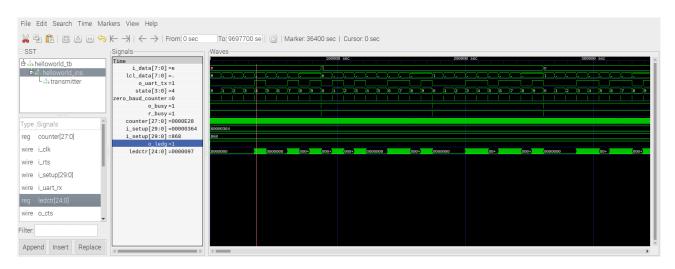devel@pi4-20:~/102121icozip/rtl/uart $ iverilog -o dsn helloworld_tb.v helloworld.v

devel@pi4-20:~/102121icozip/rtl/uart $ vvp dsn
VCD info: dumpfile helloworld.vcd opened for output.
Killed

devel@pi4-20:~ $ kill -9 9093

devel@pi4-20:~/102121icozip/rtl/uart $ gtkwave helloworld.vcd

GTKWave Analyzer v3.3.104 (w)1999-2020 BSI

Near byte 57770007, Unknown VCD identifier: '11101100101000010010'
[0] start time.
[9697700] end time.

i_setup is 0x364 or 868 is for a baudrate 115200.

		868.055555
100000000	115200	555556
		434.027777
100000000	230400	777778
100000000	345600	289.351851

		851852
		217.013888
100000000	460800	888889

		108.506944
100000000	921600	444444

		54.2534722
100000000	1843200	222222

state is 0-9 for the 10 bits to transmit 1 ASCII chacter.

```
devel@pi4-20:~/102121icozip/rtl/uart $ git diff helloworld.pcf
diff --git a/rtl/uart/helloworld.pcf b/rtl/uart/helloworld.pcf
index 8337466..b12f38f 100644
--- a/rtl/uart/helloworld.pcf
+++ b/rtl/uart/helloworld.pcf
@@ -13,6 +13,6 @@ set_io o_ledg A9        #IOT_194 LED1
 #set_io o_ledr   B7        #IOT_207 LED4

 set_io i_rts A1              #IOT_220 PM2-A1 i_rts
-set_io o_uart_tx B3         #IOT_214 PM2-A3
-set_io i_uart_rx B5         #IOT_223 PM2-A2
+set_io o_uart_tx B3          #IOT_214 PM2-A2
+set_io i_uart_rx B5         #IOT_223 PM2-A3
 set_io o_cts B6                #IOT_208 PM2-A4 o_cts
```