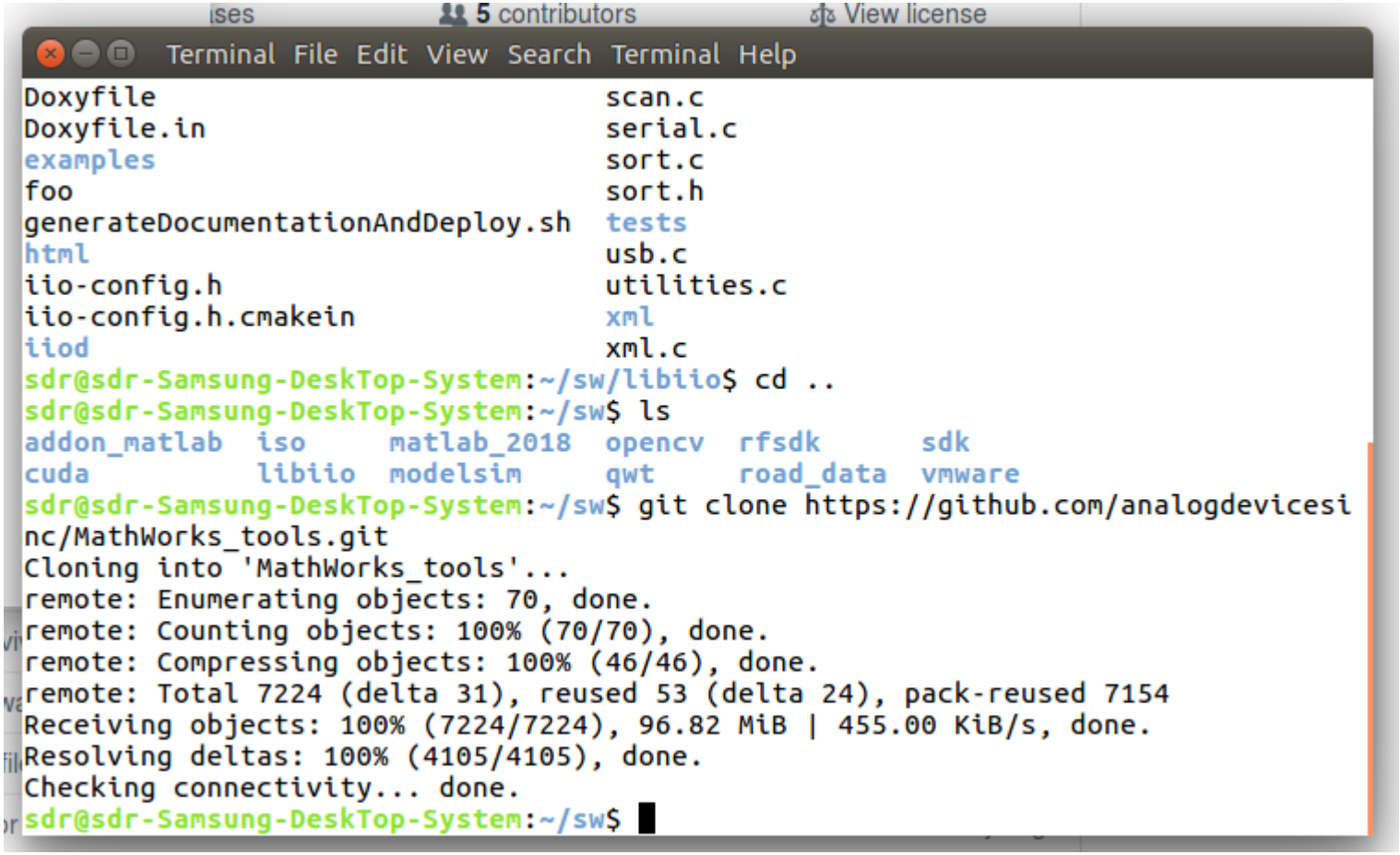
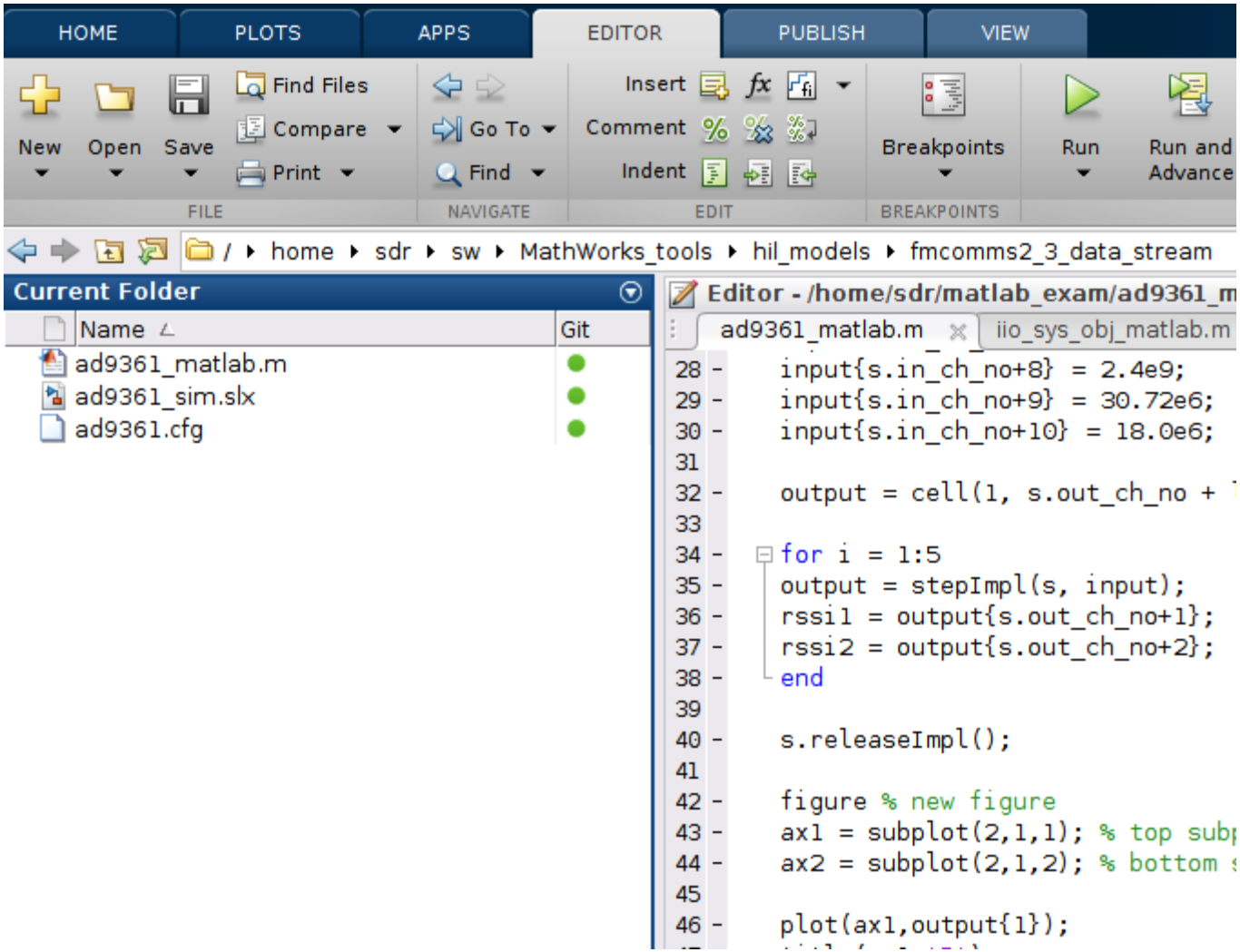
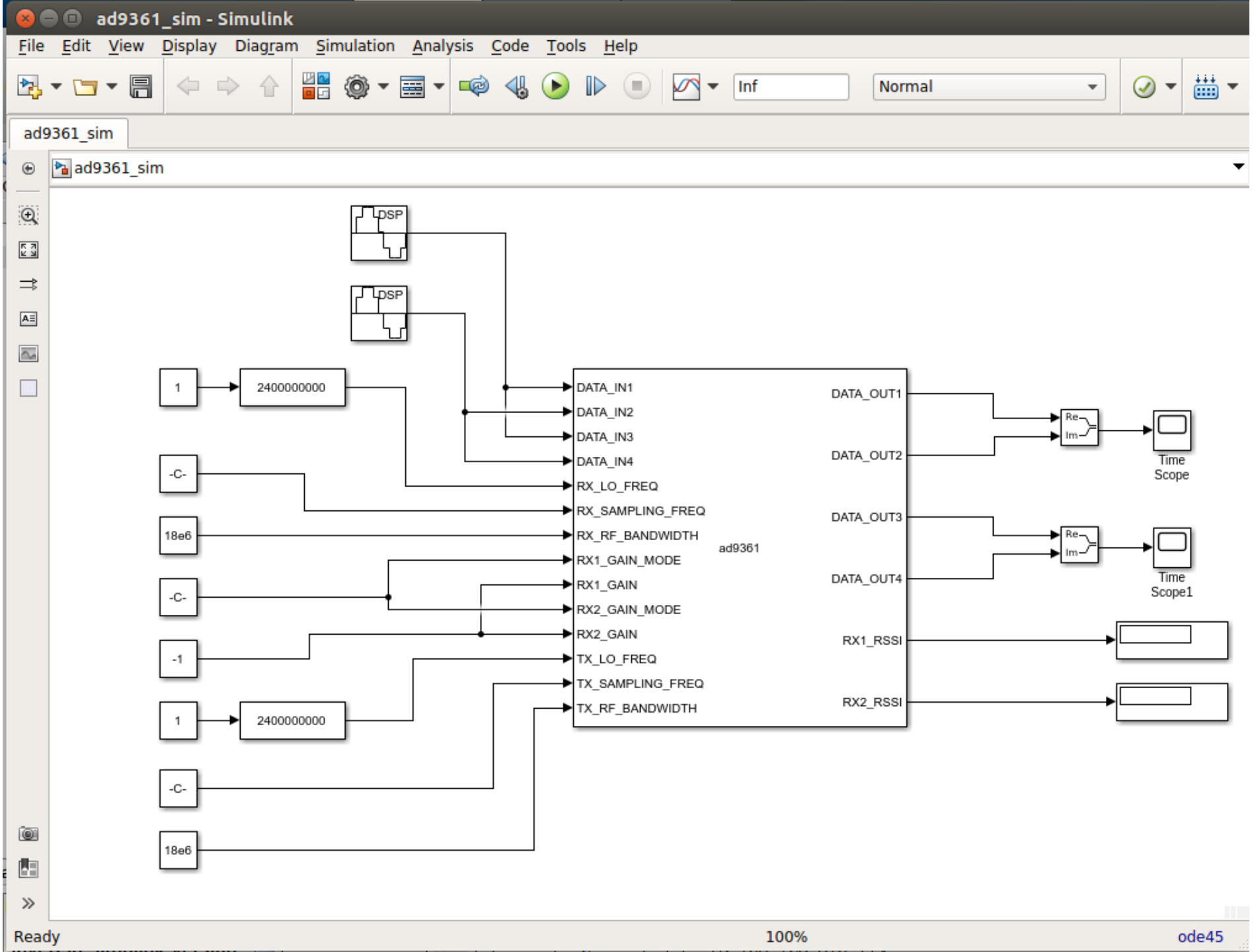
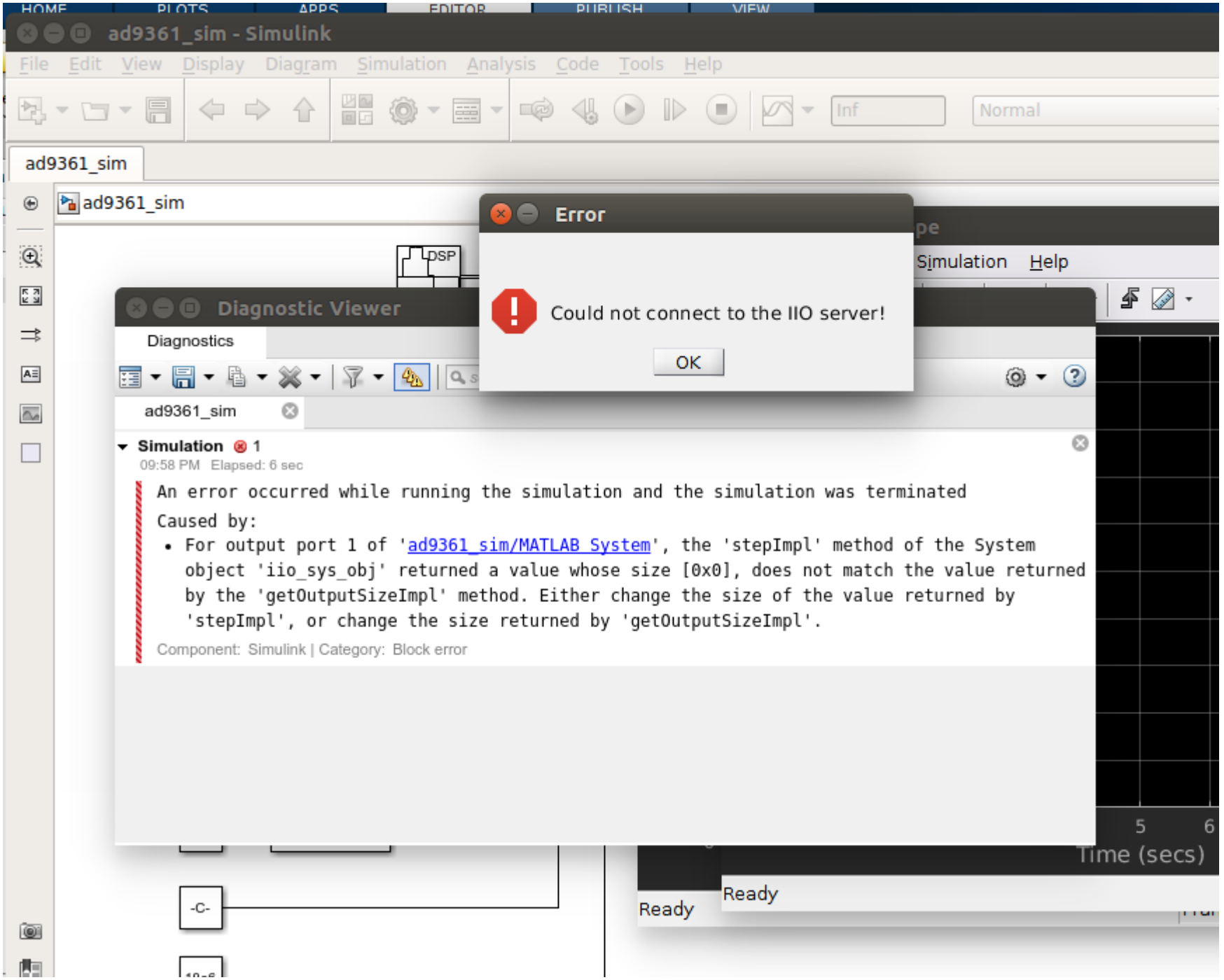
AD9361_with_ZedBoard Tutorial II

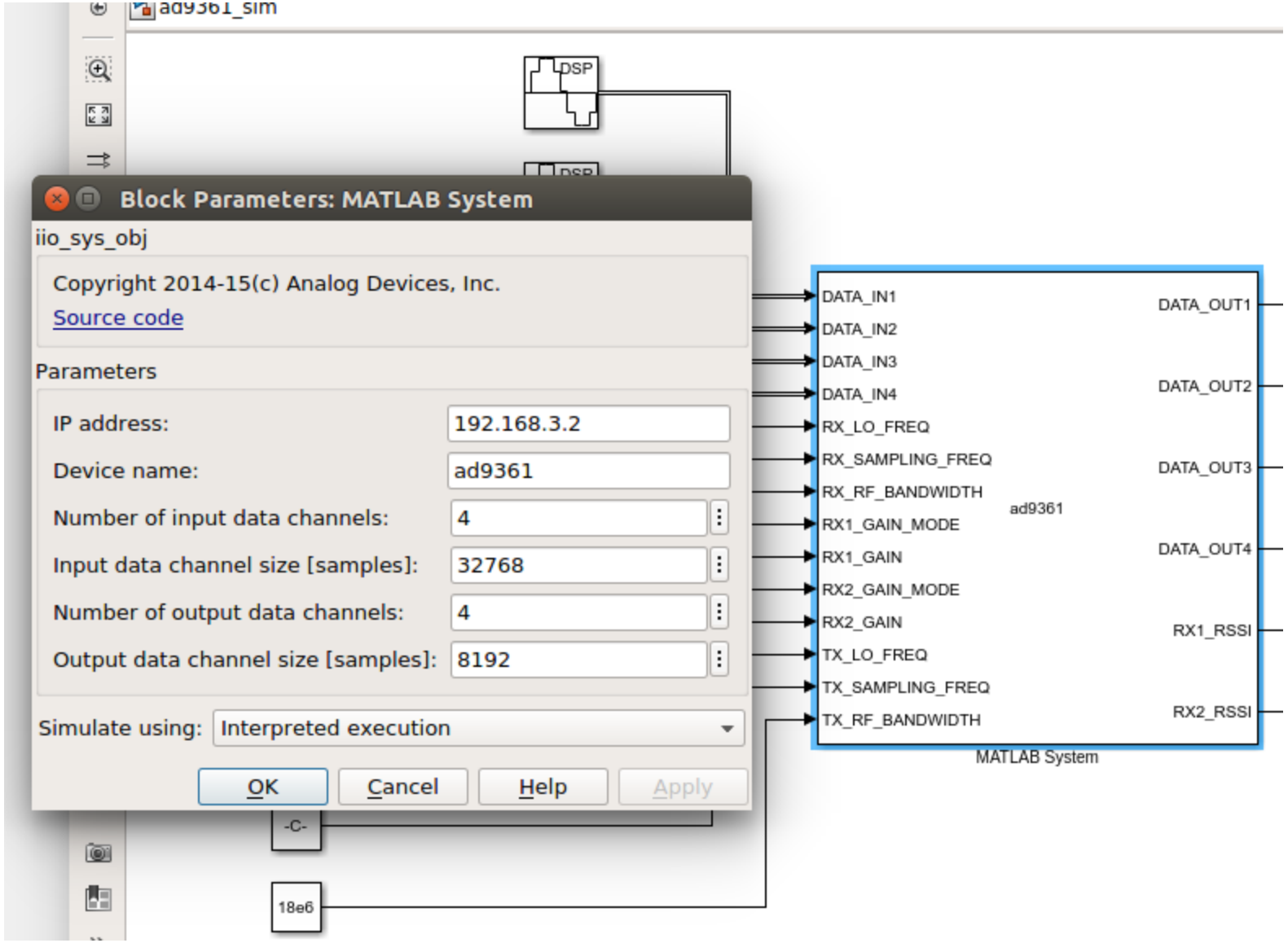
Innova Lee(이상훈)
gcccompil3r@gmail.com

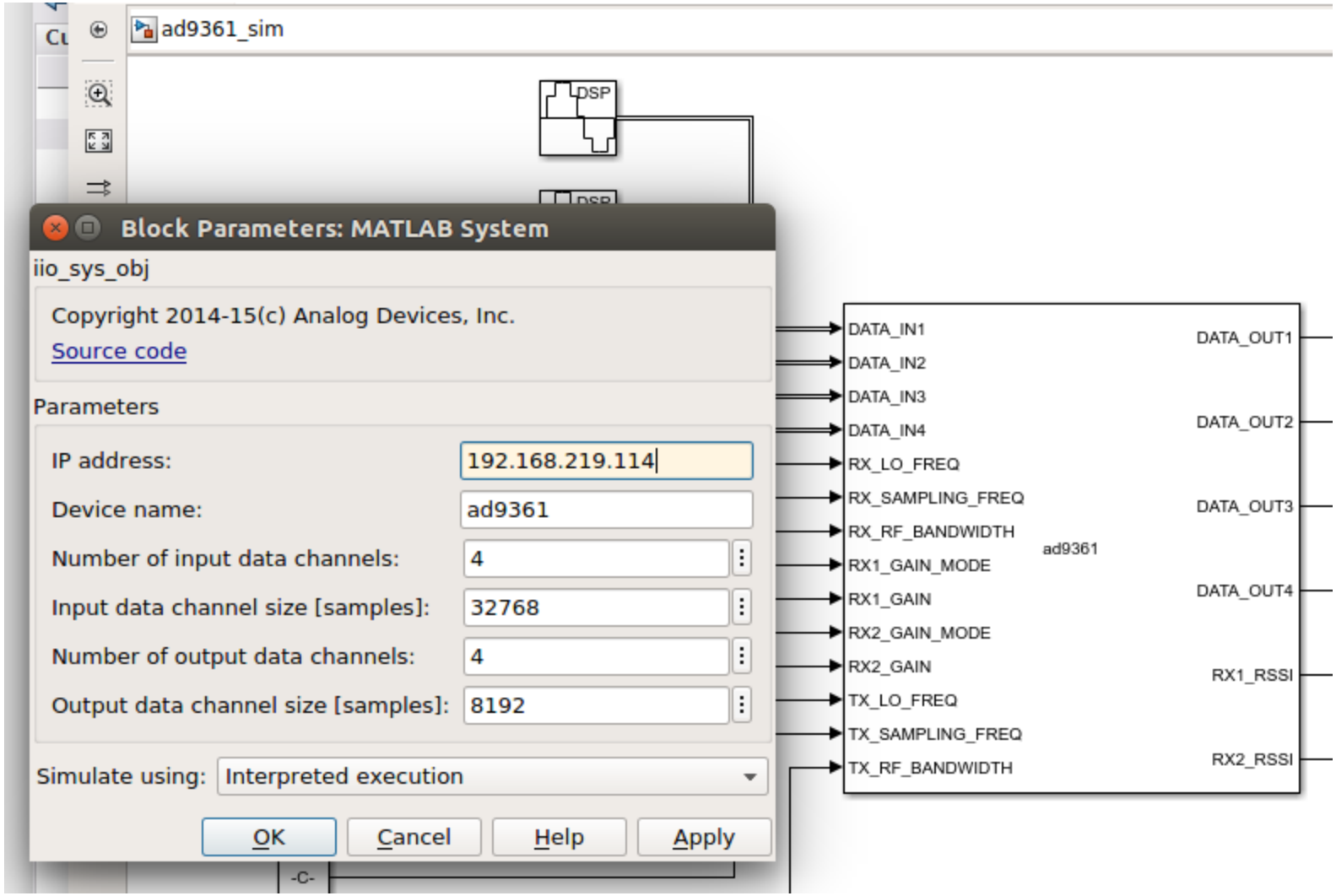

ises
5 contributors
View license
Terminal File Edit View Search Terminal Help
Doxyfile
Doxyfile.in
examples
foo
generateDocumentationAndDeploy.sh
html
iio-config.h
iio-config.h.cmakein
iiod
scan.c
serial.c
sort.c
sort.h
tests
usb.c
utilities.c
xml
xml.c
sdr@sdr-Samsung-DeskTop-System:~/sw/libiio$ cd ..
sdr@sdr-Samsung-DeskTop-System:~/sw$ ls
addon_matlab iso matlab_2018 opencv rfsdk sdk
cuda libiio modelsim qwt road_data vmware
sdr@sdr-Samsung-DeskTop-System:~/sw$ git clone https://github.com/analogdevicesi
nc/MathWorks_tools.git
Cloning into 'MathWorks_tools'...
remote: Enumerating objects: 70, done.
remote: Counting objects: 100% (70/70), done.
remote: Compressing objects: 100% (46/46), done.
remote: Total 7224 (delta 31), reused 53 (delta 24), pack-reused 7154
Receiving objects: 100% (7224/7224), 96.82 MiB | 455.00 KiB/s, done.
Resolving deltas: 100% (4105/4105), done.
Checking connectivity... done.
sdr@sdr-Samsung-DeskTop-System:~/sw$

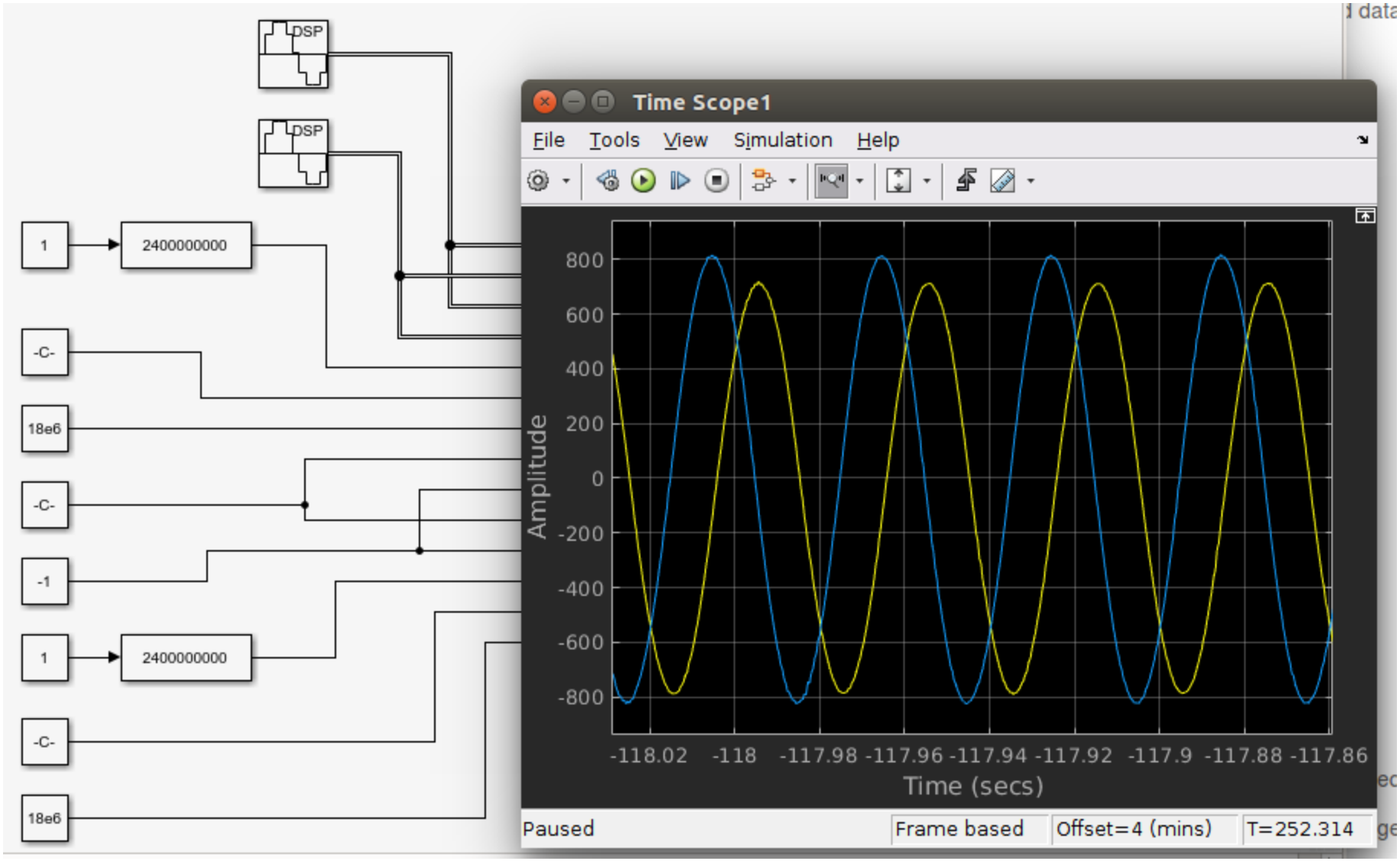

HOME
PLOTS
APPS
EDITOR
PUBLISH
VIEW
New
Open
Save
Find Files
Compare
Print
FILE
Go To
Find
NAVIGATE
Insert
Comment
Indent
EDIT
Breakpoints
BREAKPOINTS
Run
Run and Advance
/ ▸ home ▸ sdr ▸ sw ▸ MathWorks_tools ▸ hil_models ▸ fmcomms2_3_data_stream
Current Folder
Name
Git
ad9361_matlab.m
ad9361_sim.slx
ad9361.cfg
Editor - /home/sdr/matlab_exam/ad9361_m
ad9361_matlab.m
iio_sys_obj_matlab.m
28 - input{s.in_ch_no+8} = 2.4e9;
29 - input{s.in_ch_no+9} = 30.72e6;
30 - input{s.in_ch_no+10} = 18.0e6;
31
32 - output = cell(1, s.out_ch_no +
33
34 - for i = 1:5
35 - output = stepImpl(s, input);
36 - rssi1 = output{s.out_ch_no+1};
37 - rssi2 = output{s.out_ch_no+2};
38 - end
39
40 - s.releaseImpl();
41
42 - figure % new figure
43 - ax1 = subplot(2,1,1); % top subp
44 - ax2 = subplot(2,1,2); % bottom
45
46 - plot(ax1,output{1});


ad9361_sim - Simulink
File Edit View Display Diagram Simulation Analysis Code Tools Help
Inf
Normal
ad9361_sim
ad9361_sim
DSP
DSP
1
2400000000
-C-
18e6
-C-
-1
1
2400000000
-C-
18e6
DATA_IN1
DATA_IN2
DATA_IN3
DATA_IN4
RX_LO_FREQ
RX_SAMPLING_FREQ
RX_RF_BANDWIDTH
RX1_GAIN_MODE
RX1_GAIN
RX2_GAIN_MODE
RX2_GAIN
TX_LO_FREQ
TX_SAMPLING_FREQ
TX_RF_BANDWIDTH
ad9361
DATA_OUT1
DATA_OUT2
DATA_OUT3
DATA_OUT4
RX1_RSSI
RX2_RSSI
Re
Im
Time Scope
Re
Im
Time Scope1
Ready
100%
ode45


ad9361_sim - Simulink
File Edit View Display Diagram Simulation Analysis Code Tools Help
ad9361_sim
ad9361_sim
Error
Could not connect to the IIO server!
OK
Diagnostic Viewer
Diagnostics
ad9361_sim
Simulation 1
09:58 PM Elapsed: 6 sec
An error occurred while running the simulation and the simulation was terminated
Caused by:
For output port 1 of 'ad9361_sim/MATLAB System', the 'stepImpl' method of the System object 'iio_sys_obj' returned a value whose size [0x0], does not match the value returned by the 'getOutputSizeImpl' method. Either change the size of the value returned by 'stepImpl', or change the size returned by 'getOutputSizeImpl'.
Component: Simulink | Category: Block error
Simulation Help
DSP
-C-
5
6
Time (secs)
Ready
Ready


ad9361_sim
DSP
Block Parameters: MATLAB System
iio_sys_obj
Copyright 2014-15(c) Analog Devices, Inc.
Source code
Parameters
IP address:
192.168.3.2
Device name:
ad9361
Number of input data channels:
4
Input data channel size [samples]:
32768
Number of output data channels:
4
Output data channel size [samples]:
8192
Simulate using:
Interpreted execution
OK
Cancel
Help
Apply
DATA_IN1
DATA_IN2
DATA_IN3
DATA_IN4
RX_LO_FREQ
RX_SAMPLING_FREQ
RX_RF_BANDWIDTH
RX1_GAIN_MODE
RX1_GAIN
RX2_GAIN_MODE
RX2_GAIN
TX_LO_FREQ
TX_SAMPLING_FREQ
TX_RF_BANDWIDTH
ad9361
DATA_OUT1
DATA_OUT2
DATA_OUT3
DATA_OUT4
RX1_RSSI
RX2_RSSI
MATLAB System
-C-
18e6


ad9361_sim
DSP
Block Parameters: MATLAB System
iio_sys_obj
Copyright 2014-15(c) Analog Devices, Inc.
Source code
Parameters
IP address:
192.168.219.114
Device name:
ad9361
Number of input data channels:
4
Input data channel size [samples]:
32768
Number of output data channels:
4
Output data channel size [samples]:
8192
Simulate using:
Interpreted execution
OK
Cancel
Help
Apply
DATA_IN1
DATA_IN2
DATA_IN3
DATA_IN4
RX_LO_FREQ
RX_SAMPLING_FREQ
RX_RF_BANDWIDTH
RX1_GAIN_MODE
RX1_GAIN
RX2_GAIN_MODE
RX2_GAIN
TX_LO_FREQ
TX_SAMPLING_FREQ
TX_RF_BANDWIDTH
ad9361
DATA_OUT1
DATA_OUT2
DATA_OUT3
DATA_OUT4
RX1_RSSI
RX2_RSSI
-C-


DSP
DSP
1
2400000000
-C-
18e6
-C-
-1
1
2400000000
-C-
18e6
Time Scope1
File
Tools
View
Simulation
Help
800
600
400
200
0
-200
-400
-600
-800
Amplitude
-118.02
-118
-117.98
-117.96
-117.94
-117.92
-117.9
-117.88
-117.86
Time (secs)
Paused
Frame based
Offset=4 (mins)
T=252.314