

GRC Options and Hardware Parameters

GUI Parameters

Options
ID: uhd_fft
Title: UHD FFT Plotter
Author: Example
Description: FFT waveform plot
Generate Options: WX GUI

Parameter
ID: address
Label: IP Address
Value: addr=192.168.10.2
Type: String
Short ID: a

Parameter
ID: samp_rate
Label: Sample Rate
Value: 2M
Type: Float
Short ID: s

Parameter
ID: freq
Label: Default Frequency
Value: 1.4G
Type: Float
Short ID: f

Parameter
ID: gain
Label: Default Gain
Value: 0
Type: Float
Short ID: g

WX GUI Notebook
ID: FFT
Tab Orientation: Top
Labels: FFT, Waterfall

WX GUI Notebook
ID: square_law
Tab Orientation: Top
Labels: RMS, X^2

Source Block

File Source
File: ...Masters work/rawdata
Repeat: Yes

Throttle
Sample Rate: 2M

WX GUI Slider
ID: tun_freq
Label: UHD Freq (Hz)
Default Value: 1.4G
Minimum: 1.3G
Maximum: 1.5G
Converter: Float

WX GUI Slider
ID: tun_gain
Label: UHD Gain
Default Value: 0
Minimum: 0
Maximum: 20
Converter: Float

Display sinks

WX GUI FFT Sink
Title: FFT Plot
Sample Rate: 2M
Baseband Freq: 1.4G
Y per Div: 10 dB
Y Divs: 10
Ref Level (dB): 10
Ref Scale (p2p): 2
FFT Size: 1.024k
Refresh Rate: 30
Notebook: FFT, 0

WX GUI Waterfall Sink
Title: Waterfall Plot
Sample Rate: 2M
Baseband Freq: 0
Dynamic Range: 100
Reference Level: 0
Ref Scale (p2p): 2
FFT Size: 512
FFT Rate: 15
Window: Hamming
Notebook: FFT, 1

WX GUI Scope Sink
Title: Scope Plot
Sample Rate: 2M
Notebook: square_law, 0
Trigger Mode: Auto
Y Axis Label: Counts

WX GUI Scope Sink
Title: Scope Plot
Sample Rate: 2M
Notebook: square_law, 1
Trigger Mode: Auto
Y Axis Label: Relative_power

Signal Processing Blocks

Complex to Mag^2

Low Pass Filter
Interpolation: 1
Gain: 1M
Sample Rate: 2M
Cutoff Freq: 1M
Transition Width: 10k
Window: Hamming
Beta: 6.76

RMS
Alpha: 1

Keep 1 in N
N: 5

