Options
Title: 5Ghz Communication
Output Language: Python
Generate Options: QT GUI

Variable
ID: samp_rate
Value: 64k

Variable
ID: fc
Value: 8k

Import
Import: np

Variable
ID: N
Value: 4

Complexity: 577ubal

QT GUI Range
ID: delay_1
Label: Delay
Default Value: 75
Start: 0
Stop: 1k
Step: 1

Random Source
Minimum: 0
Maximum: 4
Num Samples: 1k
Repeat: Yes
out

in
set_symbol_table
Chunks to Symbols
Symbol Table: 1, 6...7e-16-1j
Dimension: 1
out

in
Throttle (old)
Sample Rate: 64k
out

in
Interpolating FIR Filter
Interpolation: 64
Taps: np.ones(samp_rate //...
out

Virtual Source
Stream ID: decoded_psk_bb
out

in
Delay
Delay: 75
out

in
Virtual Sink
Stream ID: psk_bb

in0
in1
QT GUI Time Sink
Name: Data Tx and Rx
Number of Points: 1.024k
Sample Rate: 64k
Autoscale: Yes

in
QT GUI Constellation Sink
Number of Points: 1.024k
Autoscale: Yes

Virtual Source
Stream ID: psk_bb
out

in0
in1
Multiply
out

in
Complex To Real
re

in
QT GUI Time Sink
Name: Modulated
Number of Points: 1.024k
Sample Rate: 64k
Autoscale: Yes

Signal Source
Sample Rate: 64k
Waveform: Cosine
Frequency: 8k
Amplitude: 1
Offset: 0
Initial Phase (Radians): 0
out

Signal Source
Sample Rate: 64k
Waveform: Cosine
Frequency: 8k
Amplitude: 1.414
Offset: 0
Initial Phase (Radians): 0
out

in0
in1
Multiply
out

in
Low Pass Filter
Interpolation: 1
Gain: 1
Sample Rate: 64k
Cutoff Freq: 8k
Transition Width: 1k
Window: Hamming
Beta: 6.76
out

Signal Source
Sample Rate: 64k
Waveform: Sine
Frequency: 8k
Amplitude: -1.414
Offset: 0
Initial Phase (Radians): 0
out

in0
in1
Multiply
out

in
Low Pass Filter
Interpolation: 1
Gain: 1
Sample Rate: 64k
Cutoff Freq: 8k
Transition Width: 1k
Window: Hamming
Beta: 6.76
out

re
im
Float To Complex
out

in
Virtual Sink
Stream ID: decoded_psk_bb