

Options
Title: GreenCub...Transceiver
Author: Lorenzo...iego Amadio
Output Language: Python
Generate Options: QT GUI

Variable
ID: tx_baud
Value: 1.2k
 Transmission Baud

Variable
ID: rx_baud
Value: 1.2k
 Reception Baud

Import
Import: os

Variable
ID: rx_sps
Value: 40

Variable
ID: bw_fact
Value: 600m

Variable
ID: nffts
Value: 32

Variable
ID: rrc_filter
Value: firdes.root_raised_...

QT GUI Tab Widget
ID: tab
Num Tabs: 2
Label 0: Incomin...ansmission
Label 1: Ongoing transmission

Variable
ID: spb
Value: 40

Variable
ID: lpf_dec
Value: 1

Audio Source
Sample Rate: 48k
Device Name: Line ...o Cable)
 Input with FM-demodulated audio

Null Source

Signal Source
Sample Rate: 48k
Waveform: Cosine
Frequency: -1.6k
Amplitude: 1
Offset: 0
Initial Phase (Radians): 0

Float To Complex

Multiply

Low Pass Filter
Decimation: 4
Gain: 1
Sample Rate: 48k
Cutoff Freq: 1.8k
Transition Width: 600
Window: Hamming
Beta: 6.76

Low Pass Filter
Decimation: 1
Gain: 1
Sample Rate: 48k
Cutoff Freq: 900
Transition Width: 240
Window: Hamming
Beta: 6.76

QT GUI Waterfall Sink
FFT Size: 1024
Center Frequency (Hz): 0
Bandwidth (Hz): 12k

Quadrature Demod
Gain: 1

Multiply Const
Constant: 750m

AGC2
Attack Rate: 100m
Decay Rate: 10m
Reference: 1
Gain: 1
Max Gain: 65.536k

Missing Block
key: blocks_udp_sink

Pack K Bits
K: 8

Binary Slicer

Symbol Sync
Timing Error Detector: Mengali and D'Andrea GMSK
Samples per Symbol: 40
Expected TED Gain: 1.5
Loop Bandwidth: 100m
Damping Factor: 500m
Maximum Deviation: 300m
Output Samples/Symbol: 1
Interpolating Resampler: MMSE, 8 tap FIR

FFT Filter
Decimation: 1
Taps: firdes.gaussian(1.0,...
Num. Threads: 1
 Gaussian pulse shaping filter to match on-board radio

DC Blocker
Length: 64k
Long Form: False

Low Pass Filter
Decimation: 1
Gain: 1
Sample Rate: 48k
Cutoff Freq: 900
Transition Width: 600
Window: Hamming
Beta: 6.76

QT GUI Time Sink
Number of Points: 10.24k
Sample Rate: 48k
Autoscale: No

Missing Block
key: blocks_udp_source

Unpack K Bits
K: 8

Repeat
Interpolation: 40

Chunks to Symbols
Symbol Table: -1, 1
Dimension: 1

FFT Filter
Decimation: 1
Taps: firdes.gaussian(1.0,...
Num. Threads: 1
 Gaussian pulse shaping filter to match on-board radio

Low Pass Filter
Decimation: 1
Gain: 1
Sample Rate: 48k
Cutoff Freq: 3.6k
Transition Width: 600
Window: Hamming
Beta: 6.76
 TX Filter

QT GUI Time Sink
Number of Points: 10.24k
Sample Rate: 48k
Autoscale: No

Multiply Const
Constant: 750m

Multiply Const
Constant: 2

Null Sink

Complex To Float

Multiply

Frequency Mod
Sensitivity: 78.5398m

Audio Sink
Sample Rate: 48k
 GFSK output

QT GUI Waterfall Sink
FFT Size: 4096
Center Frequency (Hz): 0
Bandwidth (Hz): 48k

Signal Source
Sample Rate: 48k
Waveform: Cosine
Frequency: 1.2k
Amplitude: 1
Offset: 0
Initial Phase (Radians): 0
 Adds SSB offset to the signal

QT GUI Range
ID: variable_qtgui_rang_out
Default Value: 1
Start: 0
Stop: 100
Step: 1

Variable Config
ID: gr_transmit_port
Default Value: 55.011k
Type: Int
Config File: ...ationFilePath
Section: modem
Option: GR_TransmitPort
WriteBack: None

Variable Config
ID: gr_receive_port
Default Value: 55.012k
Type: Int
Config File: ...ationFilePath
Section: modem
Option: GR_ReceivePort
WriteBack: None

Variable
ID: configurationFilePath
Value: C:\Users...config.ini

Variable Config
ID: audiocard_rx_devicename
Default Value: Line... Cable)
Type: String
Config File: ...ationFilePath
Section: gnuradio
Option: AudioCa..._DeviceName
WriteBack: None

Variable Config
ID: audiocard_tx_devicename
Default Value: ...
Type: String
Config File: ...ationFilePath
Section: gnuradio
Option: AudioCa..._DeviceName
WriteBack: None

Variable Config
ID: ssb_rx_offset
Default Value: 1.6k
Type: Float
Config File: ...ationFilePath
Section: gnuradio
Option: SSB_RX_Offset
WriteBack: None

Variable Config
ID: ssb_tx_offset
Default Value: 1.2k
Type: Float
Config File: ...ationFilePath
Section: gnuradio
Option: SSB_TX_Offset
WriteBack: None

Variable Config
ID: tx_audio_sample_rate
Default Value: 48k
Type: Float
Config File: ...ationFilePath
Section: gnuradio
Option: AudioCa..._SampleRate
WriteBack: None

Variable Config
ID: rx_audio_sample_rate
Default Value: 48k
Type: Float
Config File: ...ationFilePath
Section: gnuradio
Option: AudioCa..._SampleRate
WriteBack: None

Variable Config
ID: ssb_mode
Default Value: USB
Type: String
Config File: ...ationFilePath
Section: gnuradio
Option: SSB_Mode
WriteBack: None