

Options
Title: Not titled yet
Author: sreeja
Output Language: Python
Generate Options: QT GUI

Import
Import: np

Import
Import: digital

Variable
ID: samp_rate
Value: 20M

Variable
ID: rrc_alpha
Value: 200m

Variable
ID: uhd_device
Value: num_send..._frames=256

Increase number of UHD send frames to avoid USB underruns

QT GUI Range
ID: rx_gain
Label: Receive Gain [dB]
Default Value: 20
Start: 0
Stop: 100
Step: 1

QT GUI Range
ID: rx_freq
Label: Receive Frequency [Hz]
Default Value: 2.2295G
Start: 2.2G
Stop: 2.29G
Step: 500k

QT GUI Range
ID: rx_rate
Label: Receive ...Rate [baud]
Default Value: 1M
Start: 100k
Stop: 5M
Step: 100k

QT GUI Range
ID: rx_size
Label: Receive ...ize [bytes]
Default Value: 217
Start: 1
Stop: 1.024k
Step: 1

QT GUI Range
ID: tx_gain
Label: Transmit Gain [dB]
Default Value: 50
Start: 0
Stop: 100
Step: 1

QT GUI Range
ID: tx_freq
Label: Transmit...quency [Hz]
Default Value: 2.0295G
Start: 2G
Stop: 2.11G
Step: 500k

QT GUI Range
ID: tx_rate
Label: Transmit...Rate [baud]
Default Value: 1M
Start: 100k
Stop: 5M
Step: 100k

QT GUI Range
ID: tx_size
Label: Transmit...ize [bytes]
Default Value: 217
Start: 1
Stop: 1.024k
Step: 1

QT GUI Check Box
ID: rx_rs
Label: Receive Reed-Solomon
Default Value: True
True: True
False: False

QT GUI Label
ID: rx_frames_lbl
Label: RX Frames
Default Value: 0

QT GUI Label
ID: rx_freq_err_lbl
Label: RX Frequ... Error [Hz]
Default Value: 0.00

QT GUI Label
ID: rx_rate_err_lbl
Label: RX Symbo...Error [ppm]
Default Value: 0.00

QT GUI Check Box
ID: tx_rs
Label: Transmit Reed-Solomon
Default Value: True
True: True
False: False

QT GUI Label
ID: tx_frames_lbl
Label: TX Frames
Default Value: tx_frames

Function Probe
ID: tx_frames
Block ID: satlab_srs4_tx_0
Function Name: get_frames
Poll Rate (Hz): 10

QT GUI Entry
ID: rx_id
Label: Receive ID
Default Value: 0

Function Probe
ID: rx_frames
Block ID: satlab_srs4_rx_0
Function Name: get_frames
Poll Rate (Hz): 10

Function Probe
ID: rx_freq_err
Block ID: satlab_srs4_rx_0
Function Name: get_freq_err
Poll Rate (Hz): 10

Function Probe
ID: rx_rate_err
Block ID: satlab_srs4_rx_0
Function Name: get_sym_err
Poll Rate (Hz): 10

QT GUI Check Box
ID: tx_encrypt
Label: Transmit Encrypt
Default Value: False
True: True
False: False

QT GUI Check Box
ID: tx_auth
Label: Transmit Authenticate
Default Value: False
True: True
False: False

QT GUI Entry
ID: tx_key
Label: Transmit Key
Default Value: 0000...00000000

QT GUI Entry
ID: tx_id
Label: Transmit ID
Default Value: 0

QT GUI Check Box
ID: rx_decrypt
Label: Receive Decrypt
Default Value: False
True: True
False: False

QT GUI Check Box
ID: rx_auth
Label: Receive Authenticate
Default Value: False
True: True
False: False

QT GUI Entry
ID: rx_key
Label: Receive Key
Default Value: 0000...00000000

