

Options

Title: Backscat... - Receiver

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Output Language: Python

Generate Options: QT GUI

Variable

ID: samp_rate

Value: 2M

QT GUI Chooser

ID: chooser

Num Options: List

Options: [2412e6, 2417e6, ...

Labels: ["1","2","3","4","...

Default option: 2.422G

desired channel where carrier
is transmitted

QT GUI Range

ID: RX_gain

Label: RX Gain

Default Value: 10

Start: 0

Stop: 60

Step: 1

gain adjustment

Variable

ID: bit_time_length

Value: 10

Time in ms for a single Bit

Soapy LimeSDR Source

Sample Rate: 2M

Center Freq (Hz): 2.422G

Frequency Shift

Sample Rate: 2M

Frequency Shift: -12.5M

Remove frequency shift
in order to minimize the
needed sample rate

Root Raised Cosine Filter

Decimation: 1

Gain: 2

Sample Rate: 2M

Symbol Rate: 100

Alpha: 500m

Num Taps: 16

Vector Source

Vector: (1,1,1,0,0,0,1,0,0...

Tags:

Repeat: Yes

Preamble reference

Repeat

Interpolation: 20k

Adjust length to match
bit length in accordance
with samp_rate

Correlation

Corr_Length: 20k

Find preamble in signal

Hamming

IN 1: continuous data
IN 2: enable threshold

Deinterleaving

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