Options
Title: FM Stereo...Transmitter
Output Language: Python
Generate Options: QT GUI

Variable
ID: samp_rate
Value: 380k

QT GUI Range
ID: pilot_ampl
Label: 19 kHz S...t Amplitude
Default Value: 500m
Start: 0
Stop: 10
Step: 50m

QT GUI Range
ID: sc_ampl
Label: 38 kHz S...r Amplitude
Default Value: 5
Start: 0
Stop: 10
Step: 100m

QT GUI Range
ID: bb_gain
Label: Baseband Audio Gain
Default Value: 1.5
Start: 0
Stop: 10
Step: 50m

QT GUI Range
ID: pha_offset
Label: 38 kHz S...rrier Phase
Default Value: 0
Start: 0
Stop: 3.14
Step: 20m

QT GUI Range
ID: tx_freq
Label: TX Frequency
Default Value: 103.7
Start: 87.5M
Stop: 108M
Step: 100k

QT GUI Range
ID: rds_ampl
Label: 57 kHz S...r Amplitude
Default Value: 100m
Start: 0
Stop: 10
Step: 100m

Low Pass Filter
Interpolation: 1
Gain: 1.5
Sample Rate: 380k
Cutoff Freq: 15k
Transition Width: 2k
Window: Hamming
Beta: 6.76

Low Pass Filter
Interpolation: 1
Gain: 1
Sample Rate: 380k
Cutoff Freq: 76k
Transition Width: 10k
Window: Hamming
Beta: 6.76

Frequency Mod
Sensitivity: 1.2

PlutoSDR Sink
IIO context URI: 192.168.2.1
LO Frequency: 103.7M
Sample Rate: 380k
Buffer size: 32.768k
Cyclic: False
Attenuation TX1 (dB): 10
Filter Configuration: Auto
RF Bandwidth (Hz): 20M

Rational Resampler
Interpolation: 380
Decimation: 48
Taps:
Fractional BW: 0

FM Preemphasis
Sample Rate: 380k
Tau: 75u
High Corner Freq: -1

Add

Wav File Source
File: ... Close!) - 16bit.wav
Repeat: Yes

Rational Resampler
Interpolation: 380
Decimation: 48
Taps:
Fractional BW: 0

FM Preemphasis
Sample Rate: 380k
Tau: 75u
High Corner Freq: -1

Subtract

Add

QT GUI Frequency Sink
FFT Size: 1024
Center Frequency (Hz): 0
Bandwidth (Hz): 380k

Band Pass Filter
Decimation: 1
Gain: 1
Sample Rate: 380k
Low Cutoff Freq: 23k
High Cutoff Freq: 53k
Transition Width: 2k
Window: Hamming
Beta: 6.76

Multiply

RDS Encoder
PTY Locale: North America
PTY: Culture / Adult Hits
MS: Music
PS: RDSTEST
AF1: 89.7M
TP: False
TA: False
PI Country Code: DE
PI Coverage Area: Local
PI Program Reference Number: 147
Radiotext: Snowfl... Give It Up

Differential Encoder
Coding: Differential
Modulus: 2

Signal Source
Sample Rate: 380k
Waveform: Sine
Frequency: 19k
Amplitude: 500m
Offset: 0
Initial Phase (Radians): 0

Signal Source
Sample Rate: 380k
Waveform: Sine
Frequency: 38k
Amplitude: 5
Offset: 0
Initial Phase (Radians): 0

Unpack K Bits
K: 2

Map
Map: 1, 2

Root Raised Cosine Filter
Interpolation: 160
Gain: 111
Sample Rate: 380k
Symbol Rate: 2.375k
Alpha: 1
Num Taps: 1.76k

Multiply

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

set_symbol_table

Variable
ID: outbuffer
Value: 10

Signal Source
Sample Rate: 380k
Waveform: Sine
Frequency: 57k
Amplitude: 100m
Offset: 0
Initial Phase (Radians): 0