

Options
Title: VTR Head...er Analysis
Author: VideoMem
Copyright: (c)
Output Language: Python
Generate Options: QT GUI

Import
Import: math

Variable
Id: samp_rate
Value: 35.8M

Variable
Id: if_rate
Value: 20M

Variable
Id: audio_rate
Value: 192k

Variable
Id: Fh
Value: 15.734k

Variable
Id: NTSC_luma_carrier_fc
Value: 3.57949M

Variable
Id: if_lo_reference_fc
Value: 629.36k

QT GUI Range
Id: chroma_coarse
Label: Coarse
Default Value: -4.36k
Start: -5k
Stop: 1k
Step: 1

QT GUI Range
Id: chroma_fine
Label: Fine
Default Value: 0
Start: -1
Stop: 1
Step: 100u

QT GUI Range
Id: meter_zero
Label: Meter zero adjust
Default Value: 100m
Start: -3.14159
Stop: 3.14159
Step: 10m

File Source
File: ...ads/vhsjittertest.r8
Repeat: No
Add begin tag: ()
Offset: 0
Length: 0

UChar To Float

Band Pass Filter
Decimation: 1
Gain: 1
Sample Rate: 35.8M
Low Cutoff Freq: 30
High Cutoff Freq: 10M
Transition Width: 100k
Window: Hamming
Beta: 6.76

Rational Resampler
Interpolation: 200
Decimation: 358
Taps:
Fractional BW: 0

Float To Complex

Band Pass Filter
Decimation: 1
Gain: 1
Sample Rate: 20M
Low Cutoff Freq: 29.36k
High Cutoff Freq: 1.12936M
Transition Width: 200k
Window: Hamming
Beta: 6.76

AGC2
Attack Rate: 15.8892u
Decay Rate: 15.8892u
Reference: 1
Gain: 1
Max Gain: 65.536k

Virtual Sink
Stream ID: chroma

Variable
Id: FFT_points_order
Value: 5

Variable
Id: FFT_points
Value: 32

Variable
Id: FFT_bin_size
Value: 625k

Variable
Id: FFT_carrier_bin
Value: 1

Signal Source
Sample Rate: 20M
Waveform: Cosine
Frequency: 625k
Amplitude: 1
Offset: 0
Initial Phase (Radians): 0

Stream to Vector

FFT
FFT Size: 32
Forward/Reverse: Forward
Window: window.blackmanhar...
Shift: Yes
Num. Threads: 1

Vector to Stream

Skip Head
Num Items: 2

Keep 1 in N

Complex to Arg

Subtract

Virtual Sink
Stream ID: phase

Virtual Source
Stream ID: chroma

Stream to Vector

FFT
FFT Size: 32
Forward/Reverse: Forward
Window: window.blackmanhar...
Shift: Yes
Num. Threads: 1

Vector to Stream

Skip Head
Num Items: 2

Keep 1 in N

Complex to Arg

Virtual Source
Stream ID: phase

Add Const
Constant: 100m

Low Pass Filter
Decimation: 1
Gain: 1
Sample Rate: 192k
Cutoff Freq: 220
Transition Width: 1k
Window: Hamming
Beta: 6.76

QT GUI Time Sink
Name: RF Chrom... phase shift
Number of Points: 32
Sample Rate: 20M
Autoscale: No

QT GUI Number Sink
Name: Phase shift VU-meter
Autoscale: No
Average: 0
Graph Type: Horizontal

Wav File Sink
File: ...orts/Phase Shift.wav
Sample Rate: 192k
Bits per Sample: 16

Multiply Const
Constant: 100m

DC Blocker
Length: 32
Long Form: True

Audio Sink
Sample Rate: 192k