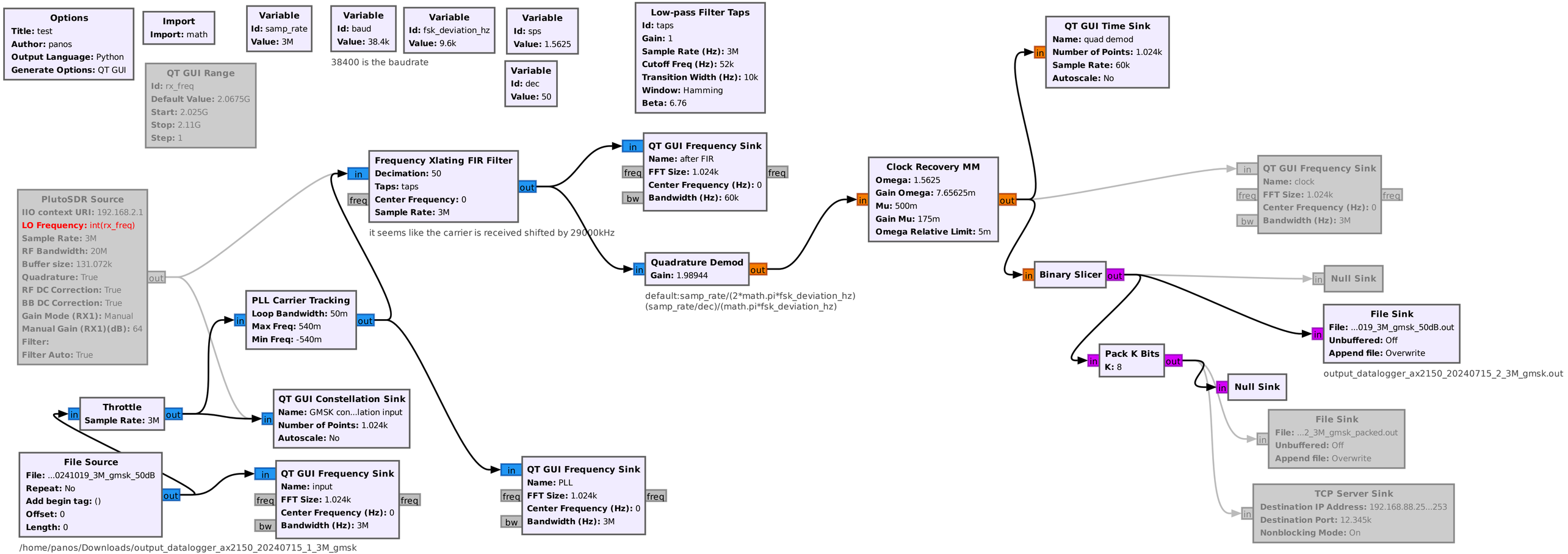
Options
Title: test
Author: panos
Output Language: Python
Generate Options: QT GUI
Import
Import: math
Variable
Id: samp_rate
Value: 3M
Variable
Id: baud
Value: 38.4k
38400 is the baudrate
Variable
Id: fsk_deviation_hz
Value: 9.6k
Variable
Id: sps
Value: 1.5625
Variable
Id: dec
Value: 50
Low-pass Filter Taps
Id: taps
Gain: 1
Sample Rate (Hz): 3M
Cutoff Freq (Hz): 52k
Transition Width (Hz): 10k
Window: Hamming
Beta: 6.76
QT GUI Range
Id: rx_freq
Default Value: 2.0675G
Start: 2.025G
Stop: 2.11G
Step: 1
QT GUI Time Sink
Name: quad demod
Number of Points: 1.024k
Sample Rate: 60k
Autoscale: No
PlutoSDR Source
IIO context URI: 192.168.2.1
LO Frequency: int(rx_freq)
Sample Rate: 3M
RF Bandwidth: 20M
Buffer size: 131.072k
Quadrature: True
RF DC Correction: True
BB DC Correction: True
Gain Mode (RX1): Manual
Manual Gain (RX1)(dB): 64
Filter:
Filter Auto: True
Frequency Xlating FIR Filter
Decimation: 50
Taps: taps
Center Frequency: 0
Sample Rate: 3M
it seems like the carrier is received shifted by 29000kHz
QT GUI Frequency Sink
Name: after FIR
FFT Size: 1.024k
Center Frequency (Hz): 0
Bandwidth (Hz): 60k
Quadrature Demod
Gain: 1.98944
default:samp_rate/(2*math.pi*fsk_deviation_hz)
(samp_rate/dec)/(math.pi*fsk_deviation_hz)
Clock Recovery MM
Omega: 1.5625
Gain Omega: 7.65625m
Mu: 500m
Gain Mu: 175m
Omega Relative Limit: 5m
QT GUI Frequency Sink
Name: clock
FFT Size: 1.024k
Center Frequency (Hz): 0
Bandwidth (Hz): 3M
PLL Carrier Tracking
Loop Bandwidth: 50m
Max Freq: 540m
Min Freq: -540m
Binary Slicer
Null Sink
File Sink
File: ...019_3M_gmsk_50dB.out
Unbuffered: Off
Append file: Overwrite
output_datalogger_ax2150_20240715_2_3M_gmsk.out
Throttle
Sample Rate: 3M
QT GUI Constellation Sink
Name: GMSK con...lation input
Number of Points: 1.024k
Autoscale: No
Pack K Bits
K: 8
Null Sink
File Source
File: ...0241019_3M_gmsk_50dB
Repeat: No
Add begin tag: ()
Offset: 0
Length: 0
QT GUI Frequency Sink
Name: input
FFT Size: 1.024k
Center Frequency (Hz): 0
Bandwidth (Hz): 3M
QT GUI Frequency Sink
Name: PLL
FFT Size: 1.024k
Center Frequency (Hz): 0
Bandwidth (Hz): 3M
File Sink
File: ...2_3M_gmsk_packed.out
Unbuffered: Off
Append file: Overwrite
TCP Server Sink
Destination IP Address: 192.168.88.25...253
Destination Port: 12.345k
Nonblocking Mode: On
/home/panos/Downloads/output_datalogger_ax2150_20240715_1_3M_gmsk