

Raspberry Pi 4B 4GB RAM

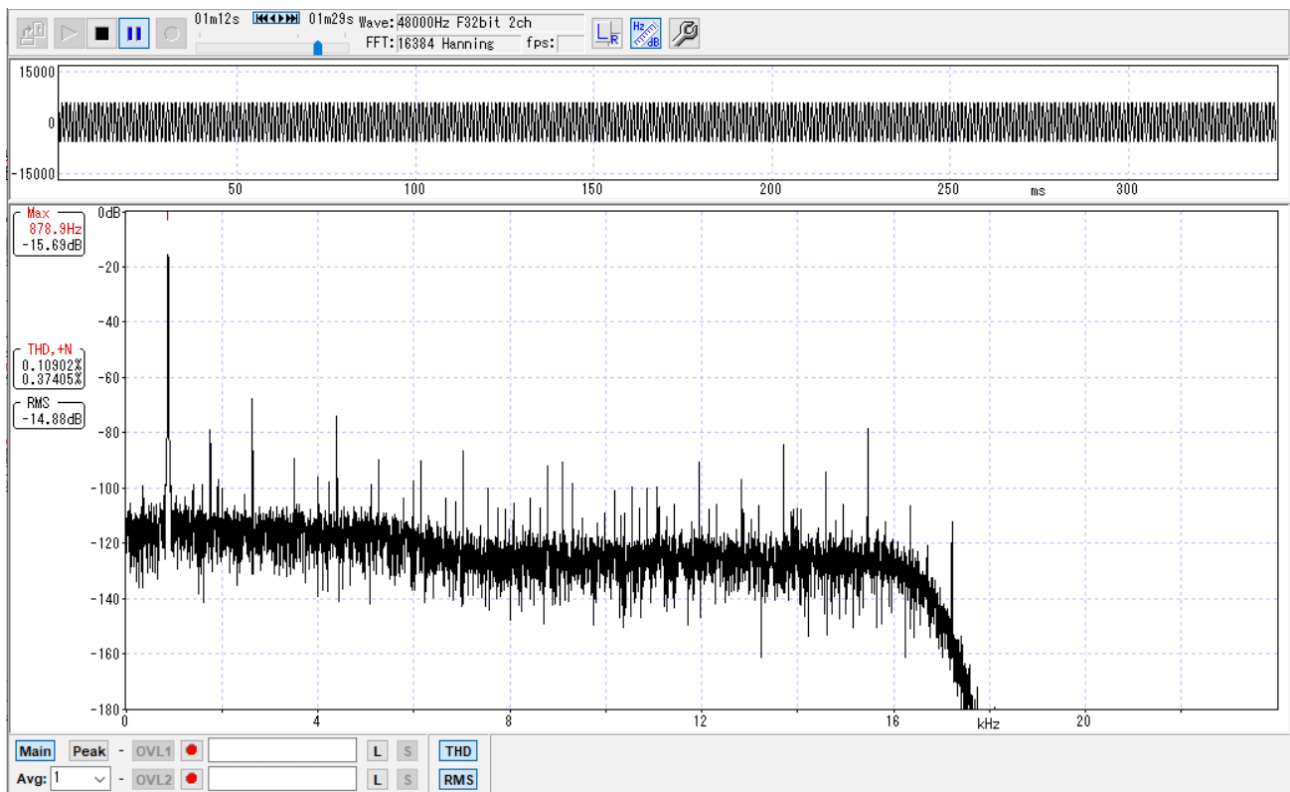
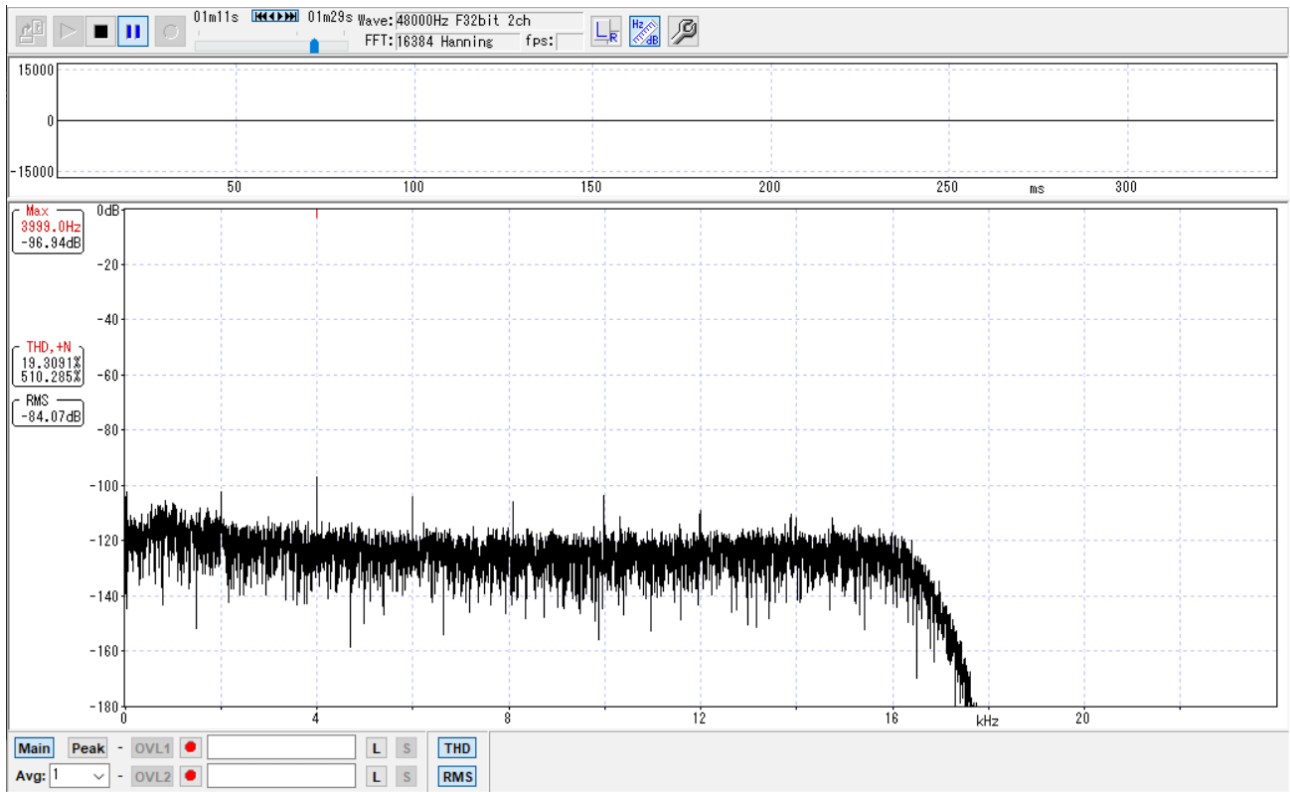
Test data: JOAK-FM 20191024 13:59~14:00 w/ FM-DDC3 STD.

1) no MPF

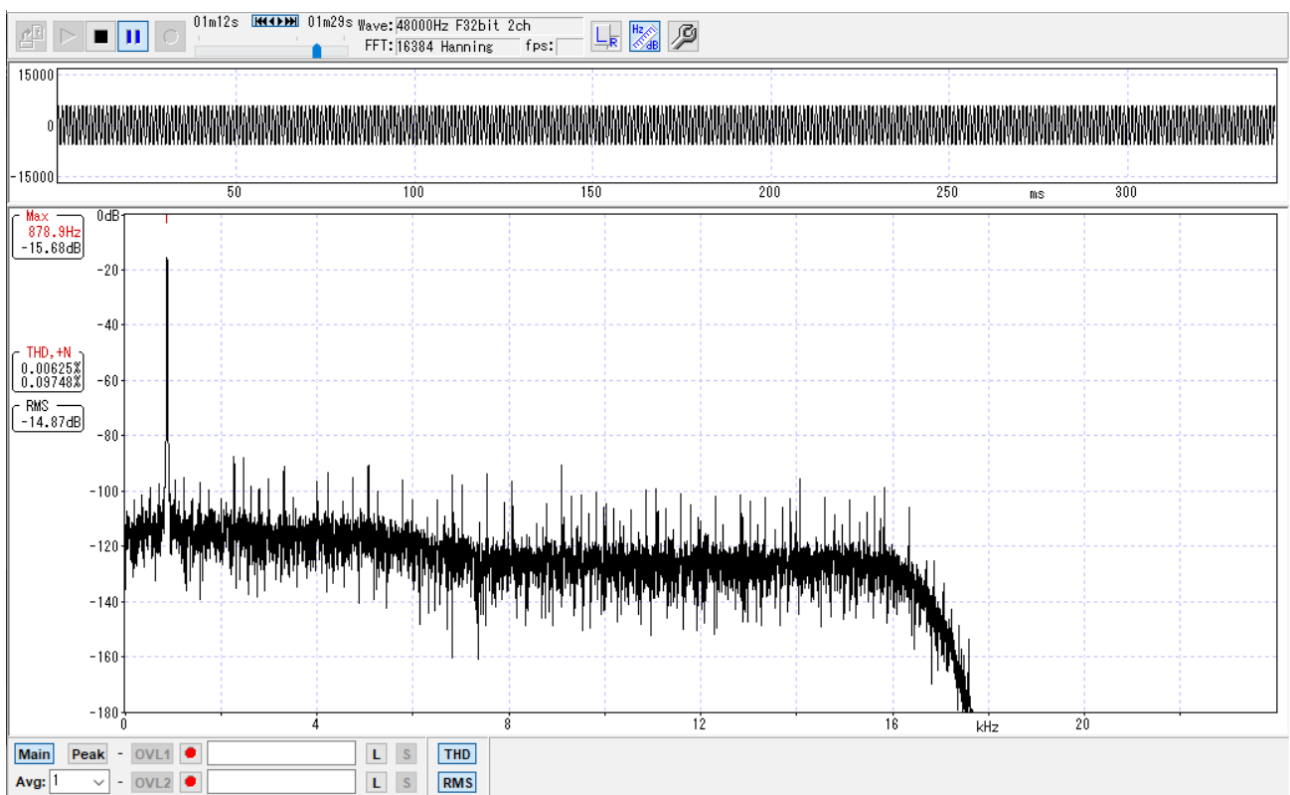
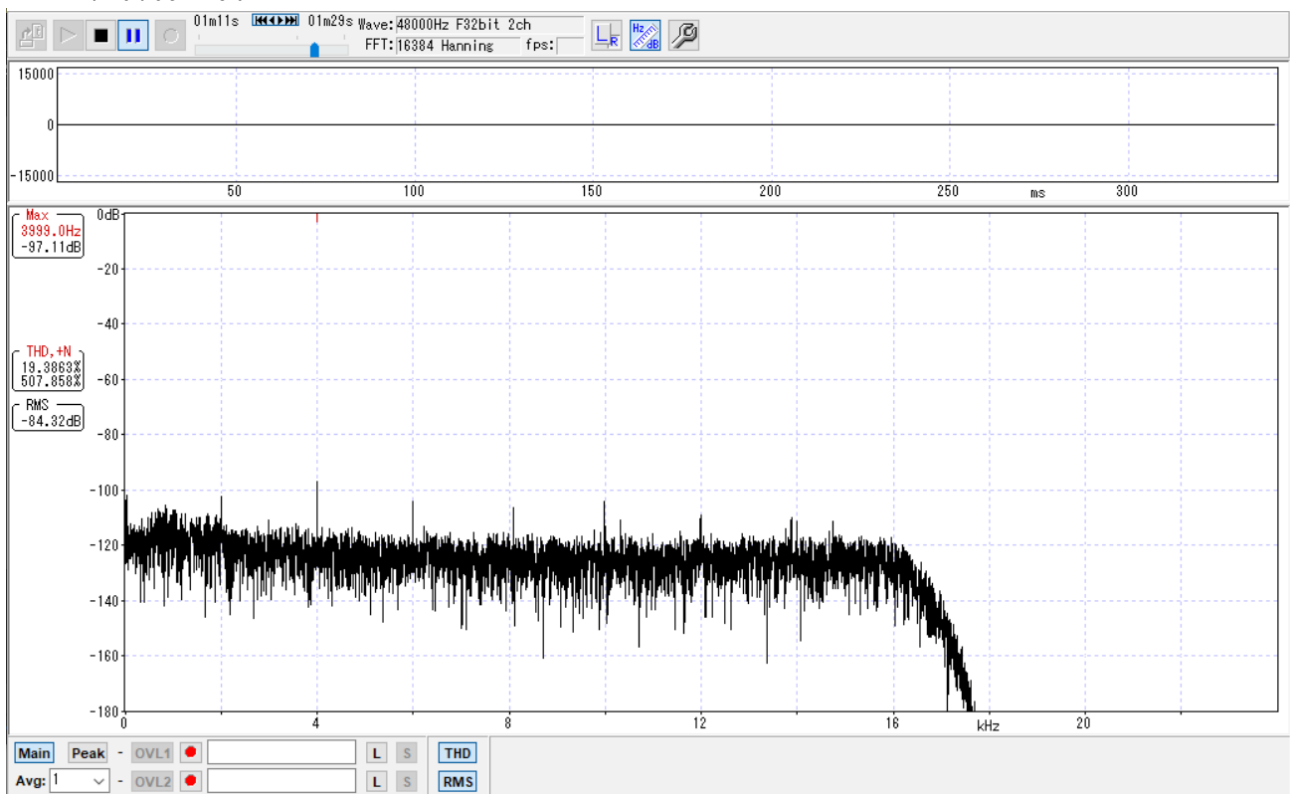
CPU usage: 42~48%

NF: -84.07dBFS

THD+N: 0.37405%



2) -E 125
CPU usage: 99~100%
NF: -84.32dBFS
THD+N: 0.09748%



console log

1)

```
pi@fpgapi9j:~/work/airspy-fmradion/build $ ./airspy-fmradion -t filesource -c
filename=/home/pi/work/kayou_IQ_201910241259.wav -b 2.0 -f default -F - | sox -t
raw -e float -r 48k -b 32 -c 2 - test_e0.wav
airspy-fmradion v0.8.1
Software FM/AM radio for Airspy R2, Airspy HF+, and RTL-SDR
output buffer length: 2 [s]
writing raw 32-bit float little-endian audio samples to '-'
using device 0: FileSource
FileSource::configure: filename: /home/pi/work/kayou_IQ_201910241259.wav
FileSource::format: WAVEX (Microsoft), Signed 24 bit PCM
tuned for 82.5 [MHz]
Decoding modulation type: fm
IF sample rate: 384000 [Hz], IF decimation: / 1
Demodulator rate: 384000 [Hz], audio decimation: / 8
audio sample rate: 48000 [Hz], audio bandwidth: 15000 [Hz]
audio totally decimated from IF by: 8
FM demodulator deemphasis: 50 [µs]
Filter type: default
```

```
got stereo signal, pilot level = 0.1049426
blk= 16860:ppm= -4.91:IF= -19.5dB:AF= -31.6dB:buf=0.49s
pi@fpgapi9j:~/work/airspy-fmradion/build $
```

2)

```
pi@fpgapi9j:~/work/airspy-fmradion/build $ ./airspy-fmradion -t filesource -c
filename=/home/pi/work/kayou_IQ_201910241259.wav -b 2.0 -f default -E 125 -F - |
sox -t raw -e float -r 48k -b 32 -c 2 - test_e125.wav
airspy-fmradion v0.8.1
Software FM/AM radio for Airspy R2, Airspy HF+, and RTL-SDR
output buffer length: 2 [s]
writing raw 32-bit float little-endian audio samples to '-'
using device 0: FileSource
FileSource::configure: filename: /home/pi/work/kayou_IQ_201910241259.wav
FileSource::format: WAVEX (Microsoft), Signed 24 bit PCM
tuned for 82.5 [MHz]
Decoding modulation type: fm
IF sample rate: 384000 [Hz], IF decimation: / 1
Demodulator rate: 384000 [Hz], audio decimation: / 8
audio sample rate: 48000 [Hz], audio bandwidth: 15000 [Hz]
audio totally decimated from IF by: 8
FM demodulator deemphasis: 50 [µs]
FM IF multipath filter enabled, stages: 125
Filter type: default
```

```
got stereo signal, pilot level = 0.1049426
blk= 16860:ppm= -4.91:IF= -19.5dB:AF= -31.5dB:buf=1.07s
pi@fpgapi9j:~/work/airspy-fmradion/build $
```