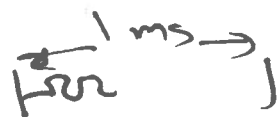
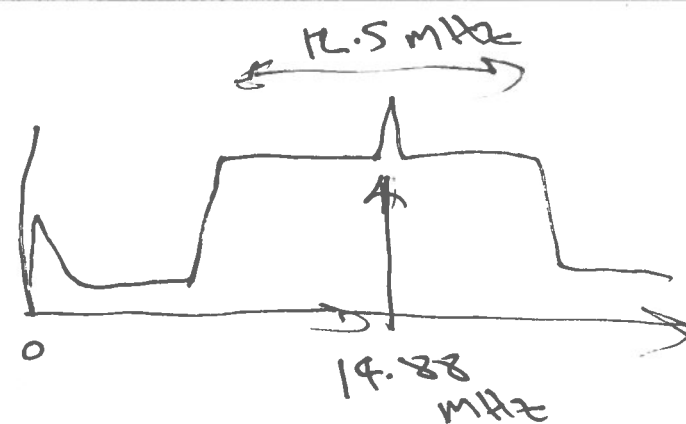
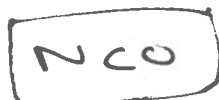
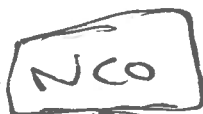
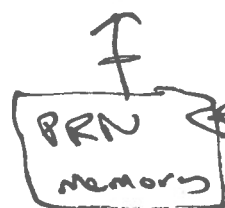


$$10 \times \log_{10} \left(\frac{1023}{1021} \right)$$

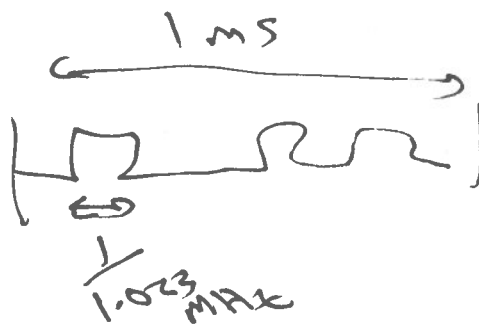
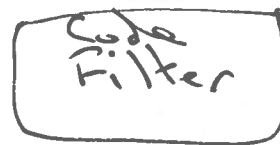
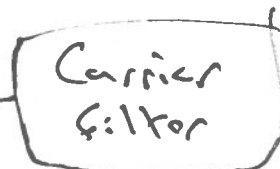
$$\left(\frac{20}{19} \right)$$



I/Q correlation



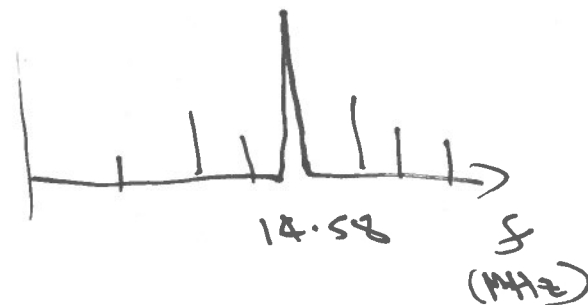
14.58 ± 0.01 kHz
20 → 50 ms



100 ms

99.375 MHz

SRM/2P5 MHz



Acquisition Results

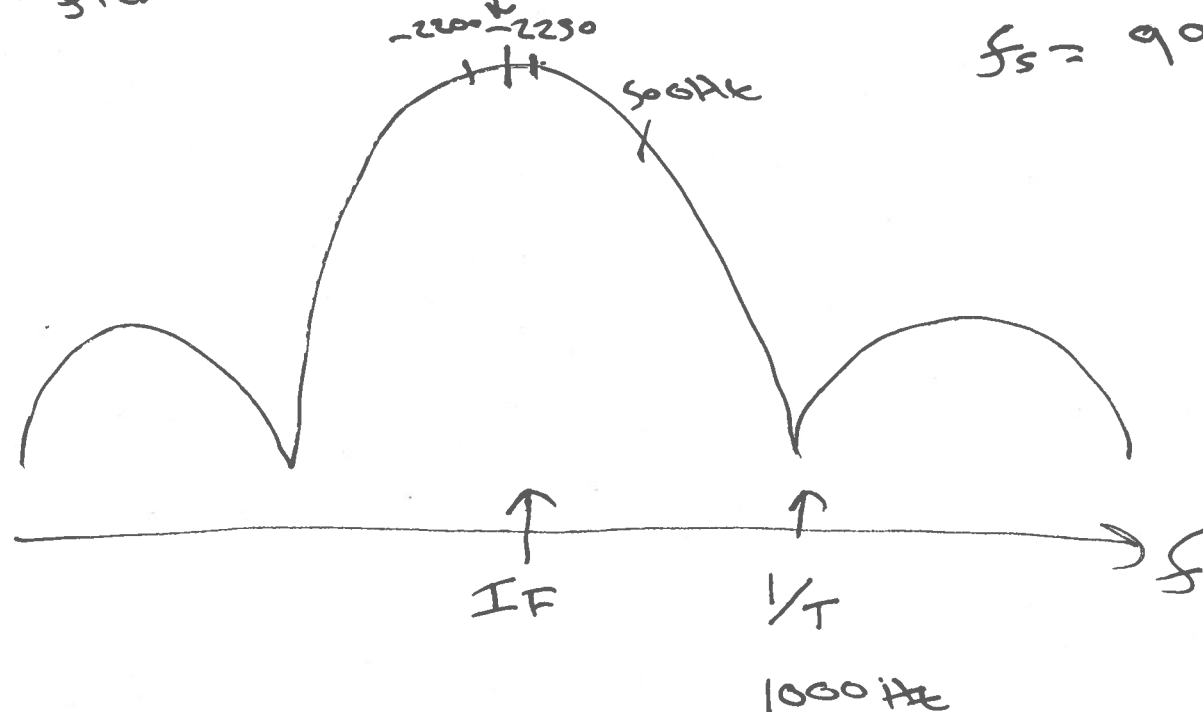
Acq Track

IF \pm Doppler freq $\rightarrow -2250$ Hz

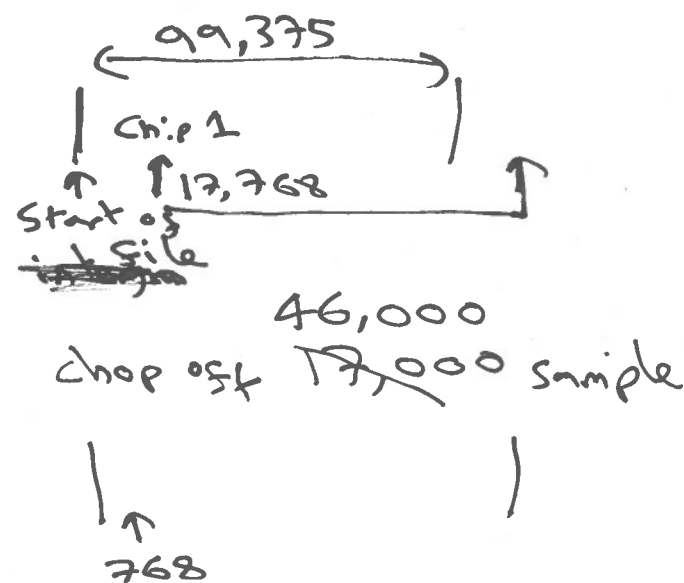
$$NCO \text{ freq} = 14.58 \text{ MHz} \pm 2250 \text{ Hz} + 25 \text{ Hz}$$

$$\text{Code offset (Samples)} = 17768$$

After correlation



$$f_s = 99.375 \text{ MHz} \quad \text{Samples per ms} = 99,375$$



$$\text{code search freq} = 1.023 \text{ MHz} + 0.5 \text{ chip/ms} + 500 \text{ Hz}$$

$$\text{Samples per chip} = \frac{99,375}{1023} \approx 97 \text{ Samples}$$