Reva Scharf

3/3/15

EC 450

HW4 Write Up

1. My measured frequency was 996.106 KHz. This is just about the expected value of 1 MHz.
2. The highest frequency I could estimate was 19.965 MHz, so pretty close to 20 MHz. I got this using DCO as 111, RSEL as 1111, and MOD as 11011 (though the MOD bits didn’t really matter since DCO was 111).
3. Using DCO as 101, RSEL as 1010, and MOD as 11011, I got the frequency to 4.04 MHz. This was the closest I could seem to get on either side of 4 MHz.

I measured these frequencies using a Picoscope in the electronics lab. The parameters were estimated using some of the documentation and then trial and error to get as close as I could. These parameters are fairly accurate. According to documentation, the maximum frequency should be between 16 and 26 MHz. My value of 20 MHz falls into this range.