

1. CN14 = RD5
TRISDbits.TRISD5 = 1
CNPUEbits.CNPUE14 = 1
2.
 - I. Core timer is 32 bit and timer 2 is 16 by default
 - II. The core timer is from the cpu clock and timer 2 is a peripheral
3. Max number of pulses = $2^{16} * 256 = 16777216$
N = 256
PR1 = Max_pulses / N - 1 = 65535
4.
 - I. PR2 = 19999
 - II. 4000
5. The two steps are sampling and conversion
 - I. Sampling uses the ADC to charge the holding capacitor to $V_{inh} - V_{inl}$.
 - II. Conversion uses the SAR uses 10_bit search to approximate V_{sha} and writes that to the buffers

