Objectives) The g**oals of this lab were t**o interface a stepper motor, to implement background processing with periodic interrupts, and to develop a dynamic linked command structure.

Hardware Design) See second to last page of report for the schematic.

Software Design) See last page of report for the state diagram. The system is the same as Figure 4.3 and 4.4 so we do not have to draw the data flow or call graph.

Measurement Data) The resistance of one coil of wire was 37.7 ohms. At 5 volts, the current through one coil of wire was 130 mA. The fastest rate that our motor can vibrate back and forth is 24 Mhz / (6(DELAY1) + 4(DELAY2) + 4(DELAY3)) = 9.69 Hz. During operation, the totally current required was 360 mA idle and 310 mA while moving.