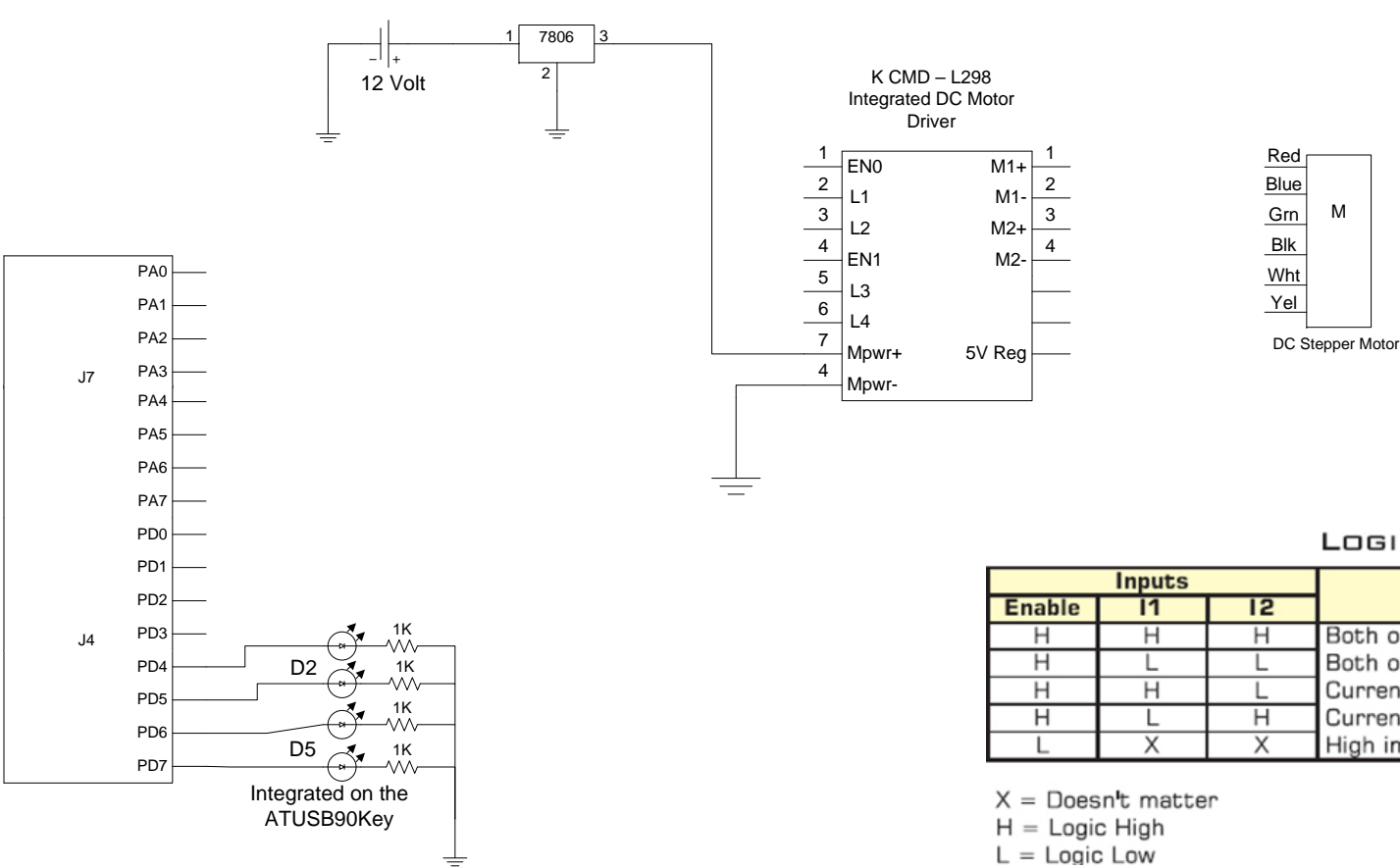


Appendix A: UVic Mechatronics Milestone 4 – Interfacing Worksheet 1



MCU Input / Output Port Voltage Levels

For $V_{cc} = 2.7-5.5V$
 $V_{IL} = -0.5$ to $0.2 V$
 $V_{IH} = 0.6 \cdot V_{cc}$ to $V_{cc} + 0.5 V$

For $V_{cc} = 3V$
 $V_{OL} = 0.2$ to $0.5 V$
 $V_{OH} = 2.3$ to $2.6 V$



LOGIC TABLE

Inputs			M1/M2 or M3/M4 Outputs
Enable	I1	I2	
H	H	H	Both outputs HIGH (motor brake)
H	L	L	Both outputs LOW (motor brake)
H	H	L	Current flow from M1 to M2 (rotates dir 1)
H	L	H	Current flow from M2 to M1 (rotates dir 2)
L	X	X	High impedance (motor coasts)

X = Doesn't matter
H = Logic High
L = Logic Low

See manufacturer documentation for the pin-out of the K-CMD kit (course website)