

The diagram illustrates the hardware configuration of the PIC18F57Q43 Curiosity Nano. The microcontroller is connected to a Capacitive Sensor (Moisture Sensor) via its ADC1 module and RA0 pin. The sensor's output is labeled as 'Capacitive Sensor Manufacturing Part #' and '(Moisture Sensor) [this block is a naming convention]'. The microcontroller's Digital I/O pins are connected to two limit switches (MS0850502F030P1A) via digital/parallel 5v, 1 pin connections. The limit switches are connected to the microcontroller's RA1, RB2, RA0, RD6, RD7, RD5, and RB5 pins. The microcontroller's RA1, RB2, and RA0 pins are connected to a connector labeled 'CONNECTOR 1' via digital/parallel 5v, 1 pin connections. The connector has 8 pins, with pins 1-5 labeled 'Digital' and pins 6-8 labeled 'ANALOG'. The microcontroller's RD6, RD7, and RD5 pins are connected to an H Bridge (FAN8100N) via digital/parallel 5v, 1 pin connections. The H Bridge is connected to a 5V 1.5A Voltage Regulator (L7805CV) and a 9v 3A Unregulated Power Supply (PJ-102AH). The voltage regulator is connected to the H Bridge via a digital/parallel 12v, 2pins connection. The H Bridge is connected to a motor (711) via a digital/parallel 12v, 2pins connection.