

# **Automatic Washing Machine Controller**

## **Project Shopping Checklist**

### **Main Components**

- ATmega32 Microcontroller - 1
- 16MHz Crystal Oscillator - 1
- 22pF Ceramic Capacitors - 2
- 5V Voltage Regulator (7805 IC) - 1
- LCD 16x2 Display (optional) - 1
- Relay Modules (5V) - 3
- NPN Transistors (2N2222 or BC547) - 3
- Flyback Diodes (1N4007) - 3
- Push Buttons - 4
- LEDs - 6
- Current Limiting Resistors (330 Ohm) - 6
- Pull-up Resistors (10k Ohm) - 4
- Water Level Sensor (Float Switch) - 1
- Magnetic Door Switch (Reed Switch) - 1
- Buzzer (optional) - 1

### **Power and Wiring**

- 5V DC Adapter (regulated) - 1
- Breadboard - 1-2
- Jumper Wires Pack
- PCB Board or Dot Matrix Board - 1
- Screw Terminals - Some

# **Automatic Washing Machine Controller**

## **Project Shopping Checklist**

- Connectors (Molex/JST) - Some

### **Tools**

- Soldering Iron Kit
- Multimeter
- Programmer (USBasp)
- Heat Shrink Tubing or Electrical Tape
- Wire Strippers and Cutter
- Small Screwdrivers