LED Status Indicators:

- Green LED (IDLE State): Digital Output, Pin 47
- Blue LED (RUNNING State): Digital Output, Pin 46
- Yellow LED (DISABLED State): Digital Output, Pin 48
- Red LED (ERROR State): Digital Output, Pin 49

User Interface Buttons:

- Start Button: Digital Input, Pin 11
- Stop Button: Digital Input, Pin 12
- Reset Button: Digital Input, Pin 13

Sensors and Modules:

- DHT11 Temperature and Humidity Module: Analog Input, Pin A15

I2C Communications:

- Arduino SDA to DS1307 RTC SDA: Input, Arduino Pin 20 to RTC Pin 3
- Arduino SCL to DS1307 RTC SCL: Input, Arduino Pin 21 to RTC Pin 4

Water Level Sensor:

- Water Level Detection: Analog Input, Pin A0

LCD Connections:

- LCD Enable (E): Digital Output, Pin 10
- LCD Register Select (RS): Digital Output, Pin 9
- LCD Data Pin D7: Digital, Pin 7
- LCD Data Pin D6: Digital, Pin 6
- LCD Data Pin D5: Digital, Pin 5
- LCD Data Pin D4: Digital, Pin 4

Motor Driver - L293D (Left Side Configuration):

- Enable Pin 1: Digital, Pin 43 Arduino
- Input 1 (In1): Digital, Pin 42 Arduino
- VCC Connection Pin 3: Connect to Red VCC
- Ground Pin 4: Connect to Ground
- Ground Pin 6: Connect to Black Ground (Fan)
- Input 2 (In2): Digital, Pin 41 Arduino
- VCC Pin 8: Connect to 5V VCC

Stepper Motor Driver Module:

- Input 1 (In1): Digital Output, Pin 35 Arduino
- Input 2 (In2): Digital Output, Pin 34 Arduino
- Input 3 (In3): Digital Output, Pin 33 Arduino
- Input 4 (In4): Digital Output, Pin 32 Arduino