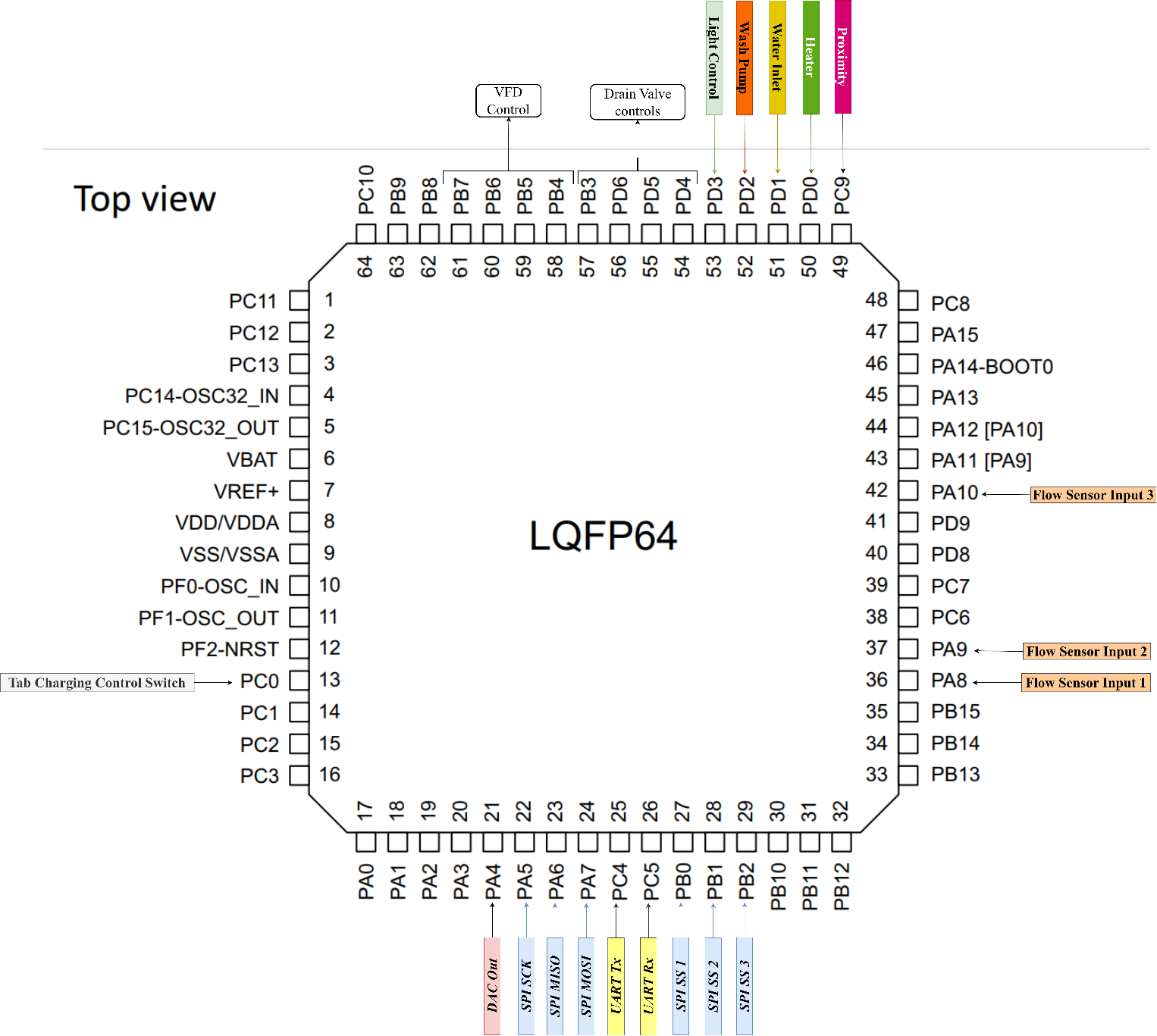
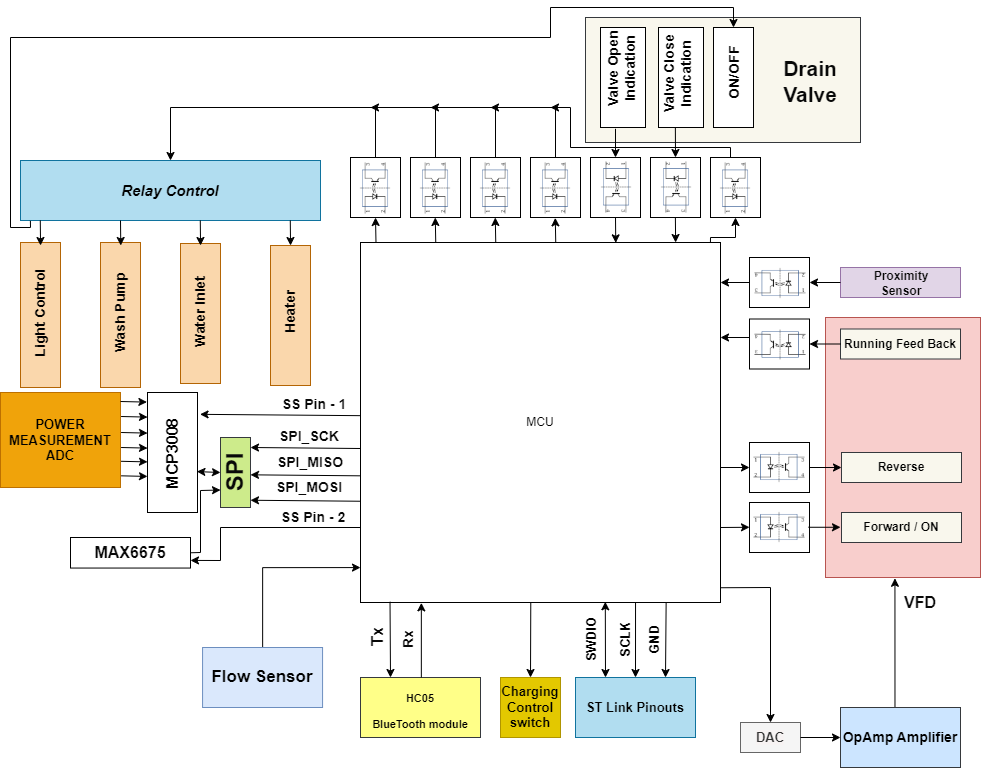
**PIN Details**

c10,b9,b8, c11,c12,c13

Port D5 🡪Light



|  |  |  |
| --- | --- | --- |
| PIN | PIN Description | I/O Type |
| **SPI** | | |
| PA5 | SPI\_SCK | Output |
| PA6 | SPI\_MISO | Input |
| PA7 | SPI\_MOSI | Output |
| PB0 | SPI\_SS 1 | Output |
| PB1 | SPI\_SS 2 | Output |
| PB2 | SPI\_SS 3 | Output |
| **Flow Sensor** | | |
| PA8 | Sensor 1 | Input |
| PA9 | Sensor 2 | Input |
| PA10 | Sensor 3 | Input |
|  |  |  |
| **Drain Valve** | | |
| PD4 | To indicate the Valve is Open | Input (OptoCoupler) |
| PD5 | To indicate the Valve is Closed | Input(OptoCoupler) |
| PD6 | ON / OFF Control | Output(OptoCoupler) |
| PB3 | Need to verify is required For Reverse operation | Output(OptoCoupler) |
|  |  |  |
| **VFD** | | |
| PB4 | Forward/ON control | Output(OptoCoupler) |
| PB5 | Reverse | Output(OptoCoupler) |
| PB6 | Motor Running Feed Back | Input(OptoCoupler) |
| PB7 | Fault Detection | Input(OptoCoupler) |
|  |  |  |
| PC9 | Proximity Sensor | Input(OptoCoupler) |
|  |  |  |
| **Relay Module** | | |
| PD0 | Heater | Output (OptoCoupler) |
| PD1 | Water Inlet | Output (OptoCoupler) |
| PD2 | Wash Pump | Output (OptoCoupler) |
| PD3 | Light Control | Output (OptoCoupler) |
|  |  |  |
| **TAB Charging Switch GPIO** | | |
| PC0 | Transistor Switch Control GPIO | Output |
| **UART** | | |
| PC4 | Uart Transmitter (Tx) | Output |
| PC5 | Uart Receiver (Rx) | Input |
|  |  |  |
| **ST LINK Debugger** | | |
| PA14 | SWDIO | I/O |
| PA13 | SCLK | Output |
|  | GND |  |
|  |  |  |

Using Pins

🡪Output Controls

<-> PD0 ---> Heater

<-> PD1 ---> Water Inlet

<-> PD2 ---> WashPump

<-> PD5 ---> Light

<-> PC0 ---> Tablet Charging Control

🡪Drain Valve Pins

<-> PB4 ---> Valve Open Indication

<-> PB5 ---> Valve Close Indication

<-> PD6 ---> Turn On the Valve

🡪UART Toggle Pin

<-> PC15 ---> LED Toggle

<-> PC15 ---> LED Toggle, CECO 100ms Task

🡪VFD Pins

<-> PD4 ---> Forward/ON

<-> PD3 ---> Reverse

<-> PB6 ---> Feedback

<-> PB7 ---> Declared🡪FaultDectection, but using Proximity Sensor Input

🡪Proximity sensor Pin

<-> PB12 --->Checking for the Bluetooth Connection.

<-> PB11 ---> Declared🡪 but it is not using.

🡪Proximity sensor Pin

<-> PB3 ---> Declared🡪Proximity sensor input, but it is not using.

🡪UART\_2 Pin

<->A2--> TX

<->A3--> RX

🡪UART\_1 Pin

<->C4--> TX

<->C5--> RX

🡪DAC Pin

<->A4--> RX

🡪Flow sensor\_ Pins

<->A8 --> Flow sensor 1

<->A9 --> Flow sensor 2

<->A10 --> Flow sensor 3

🡪SPI\_ Pin

<-> PB0--> MCP3008\_CS

<-> PB1--> TEMP2\_CS 🡪 Not Using

<-> PB2--> TEMP1\_CS 🡪 Using

<->PA5 --> SPI1\_SCK

<->PA6 --> SPI1\_MISO

<->PA7 --> SPI1\_MOSI

Not used Pins

<->PC8 ---> is not using But Declared

<->PC9 ---> is not using But Declared

<->PC1 ---> This Pin is here in Output port, But Not Declared in Ports Init

<->PC2 ---> This Pin is here in Output port, But Not Declared in Ports Init

<->PC3 ---> This Pin is used in PCB track, But Not Declared in Ports Init and Not used Anything

<->PA0 ---> This Pin is used in PCB tracks, But Not Declared in Ports Init and not used in anything

<->PA1 ---> This Pin is used in PCB tracks, But Not Declared in Ports Init and not used in anything

<->PA15 ---> This Pin is used in PCB tracks, But Not Declared in the CECO File and not used in anything

<->PC8 ---> This Pin is used in PCB tracks, Declared in Ports Init and Not used in anything

<->PB13 ---> This Pin is used in PCB tracks, Pin is not Declared.