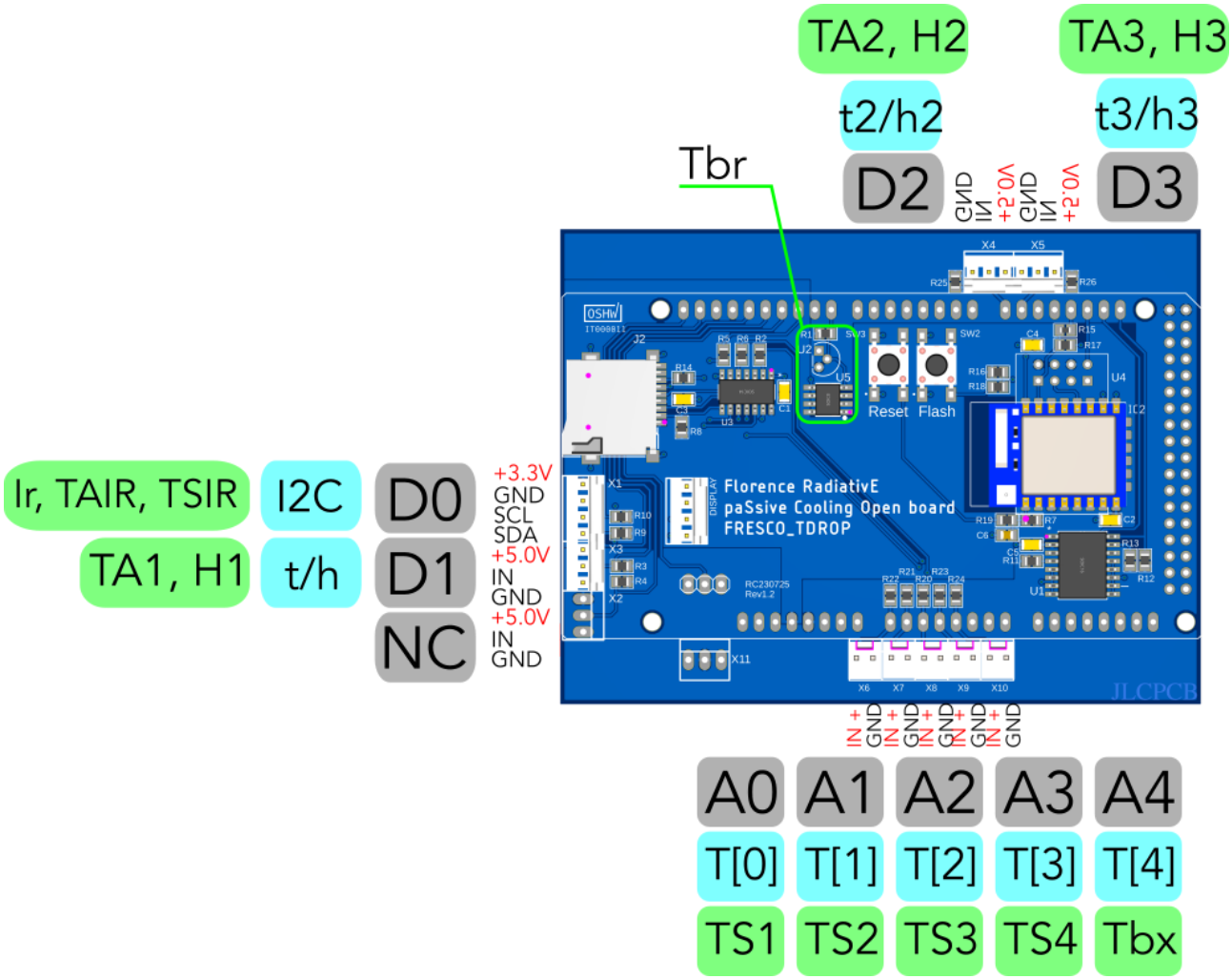
TDrop I/O pin description



PID Set Point settings

The FRESCO device allows the PID reference temperature to be set either to a value measured by a temperature sensor or to a user-defined constant. In order to set the PID to track sensor temperature, **PID Set Point (°C)** can be set to the desired reference for the PID under the "Settings" subpage in the webapp. In this case, the "**New Set Point (°C)**" must be left equal to 0.

To set the PID set point, refer to the table below for the reference number of the temperature sensor.

Reference numbers	Corresponding I/O sensor	Name on the saved file
0,1	t	TA1
2	t2	TA2
3	t3	TA3
4	T[0]	TS1
5	T[1]	TS2
6	T[2]	TS3
7	T[4]	TS4
8	T[5]	Tbx

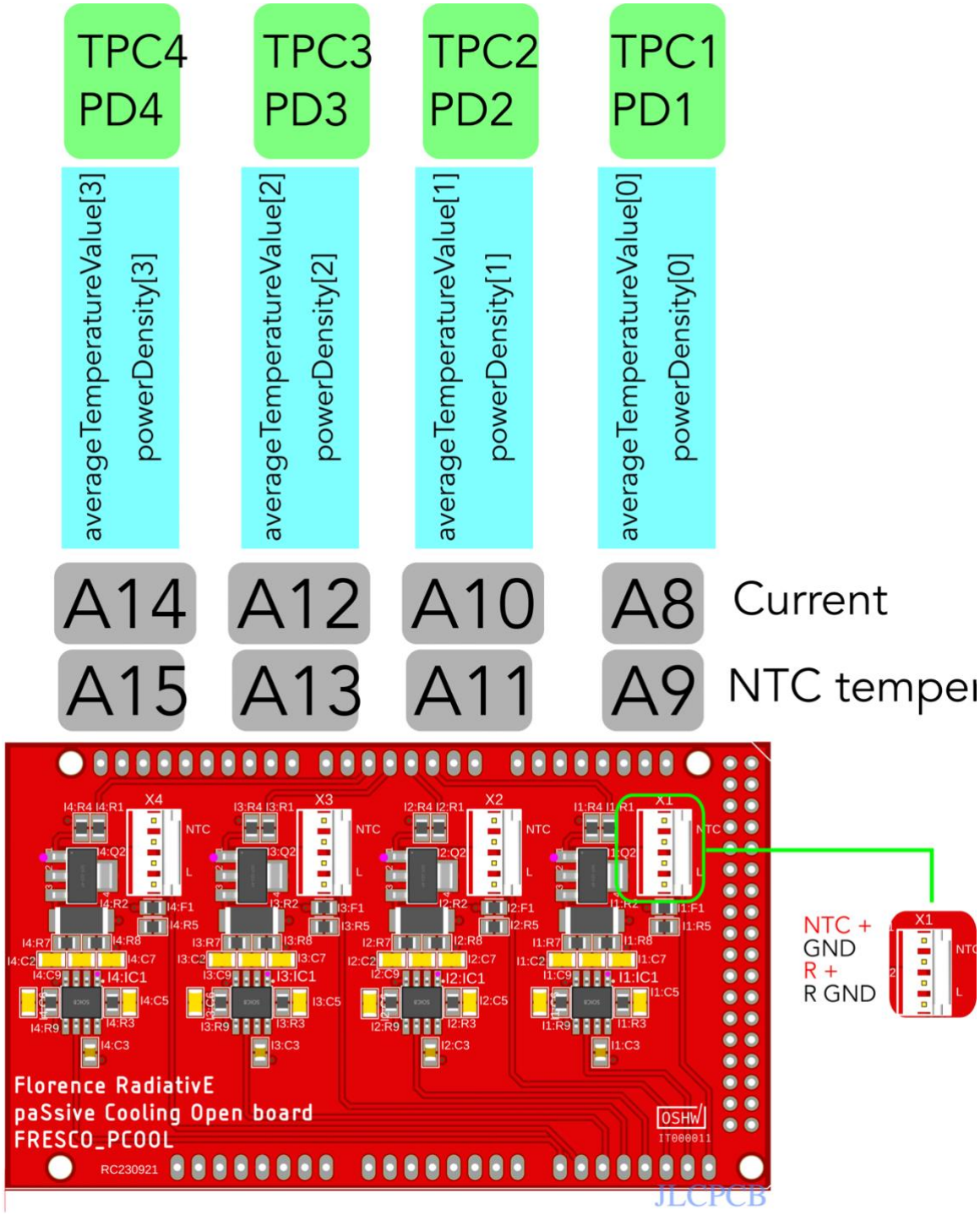
The names on the cyan labels in the figure above correspond to their respective I/O sensors, and their values are stored on the SD card under the names indicated by the green labels.
If the value entered in the **PID Set Point (°C)** does not match any predefined options, the set point will default to TA1.

Alternatively, the PID can be set to track a fixed user-defined temperature by setting the **PID Set Point (°C) equal to 10** and then using **New Set Point (°C)** to indicate a temperature value between 0 °C and 60 °C (e.g., 32.5°C). As in the previous case, the **PID Set Point (°C)** will default to TA1 for invalid input.

After pressing "*Submit*" the ESP will restart, so if you have to operate also on other settings like the WiFi or the Database you can wait the ESP restart and do it, but the measurements will be not aligned. While if you already did all the needed things, you can **turn off the power supply of the FRESCO and turn on again** to get a well alignment among Tdrop, PCool and the ESP microcontroller.

In the next page you will find the I/O ports referred to the PCool board and all useful reference already listed in the table of the previous section.

PCool I/O pin description


TPC4
PD4
TPC3
PD3
TPC2
PD2
TPC1
PD1
averageTemperatureValue[3]
powerDensity[3]
averageTemperatureValue[2]
powerDensity[2]
averageTemperatureValue[1]
powerDensity[1]
averageTemperatureValue[0]
powerDensity[0]
A14
A12
A10
A8
Current
A15
A13
A11
A9
NTC tempe
X4
X3
X2
X1
NTC
I4:IC1
I3:IC1
I2:IC1
I1:IC1
NTC +
GND
R +
R GND
Florence RadiativE
paSsive Cooling Open board
FRESCO_PCOOL
RC230921
OSHW
IT000011
JLCPCB