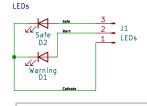
# [1] YAOSRP Cooling Plate

# Infrared Thermometer LED - IR Therm MLX90614ESF-BCC-000-TU 100n SCL/VZ SDA/PWM VDD



## DESIGN NOTE:

- Current limiting resistors are located on the mainboard.
   Warning LED is intended to be red.
   Safe LED is intended to be green.

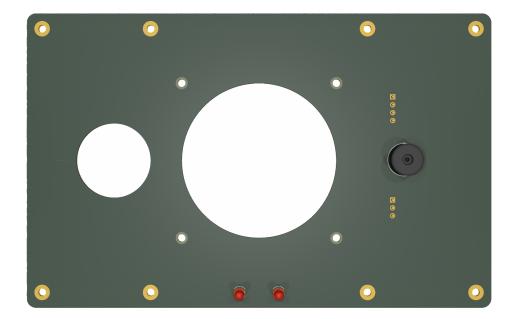
## Board mounts MountingHole\_Pad MountingHole\_Pad H5 MountingHole\_Pad MountingHole\_Pad MountingHole\_Pad MountingHole\_Pad Earth

### DESIGN NOTES:

The main mounting holes are all earthed. 3 identical plates are intended to be connected to one another using 11mm copper standoffs that are offset and then connected to the mains earth connection. This is to earth the PTC heating element.

#### Fan mounts

- O H9 MountingHole
- O H11 MountingHole
- O H12 MountingHole



## PROJECT NOTES

This board is intended to be populated with components on the bottom board only and 2 additional boards sandwiched together using 11mm copper spacers and then the PTC plate mounted to the top.

The bottom board should be 180deg in relation to 2nd/3rd board to allow the IRLED thermometer to shine up through the hole on the opposite side of the board and onto the bottom of the PTC plate. The hole has been sized to suit the 30deg IRLED lense.

The board should be earthed via one of the mounting holes to ground the PTC plate for safety purposes.

A 60x10mm fan is to be mounted on the bottom forcing air onto the hot plate. In practise the fan may not be needed and pending build of the prototype may be ommitted from a future design.

Title: YAOSRP Cooling Plate					<b>V</b> Wattle □
Sheet: / File: Board2.kicad_sch					Labs
Rev: 1.0	Date:	2025-02-19	ld: 1/1	KiCad E.D.A. 8.0.8	
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