

February 27, 2025

Reference: CSIO/MSSA/HCP0057/207

Subject: Call for Expression of Interest (EoI)/quotation for the purchase of goods/fabrication job work for the ongoing project activities- reg

It is informed that following items are proposed to be purchased /fabricated. Interested parties are requested to **submit quotation** through email/hard copy to the undersigned **within next three days** from the date of publishing of notice.

Items/Goods/Job work required

| Sr. No. | Description of the items/Goods/Jobwork | Quantity |
|---------|---|----------------|
| 1. | Fabrication, assembly and testing of Sensor Components as given below: a) pH Sensor b) Amperometric Sensor c) Colour Sensor | 02 02 02 |

Terms and Conditions:

Delivery: For CSIR-CSIO, Chandigarh

Lead time/delivery time: 2-3 weeks

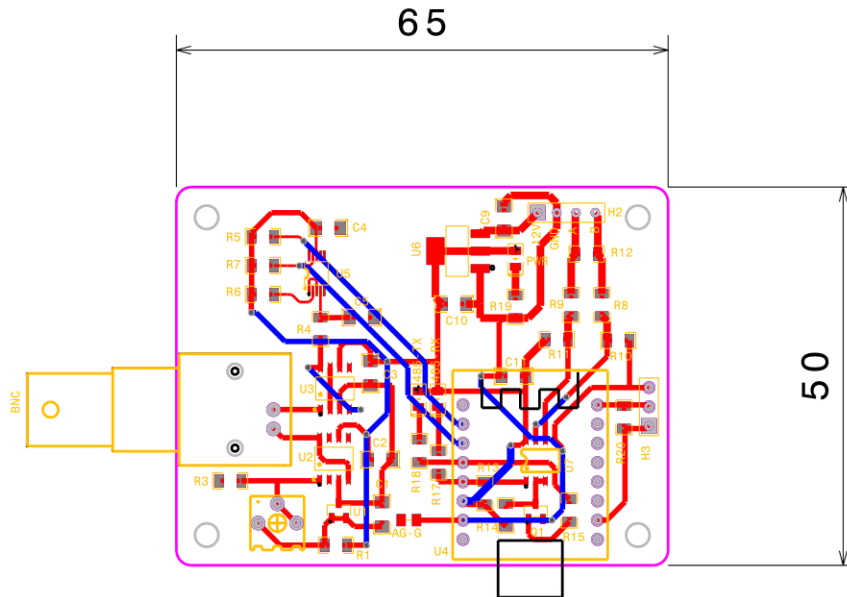
Payment: After delivery and successful inspection



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HEAD ISD, with a request to display on the CSIO website

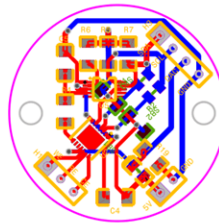
pH sensor with components



| ID | Name | Designator | Footprint |
|----|---------------|--------------------|-----------------------------------|
| 1 | | 100 R4 | R1206 |
| 2 | ADS1115IDGST | U5 | VSSOP-10_L3.0-W3.0-P0.50-LS4.9-BL |
| 3 | 1-1337543-0 | BNC | BNC-TH_1-1337543-0 |
| 4 | 0.1u | C1,C2,C3,C4,C5,C11 | C1206 |
| 5 | 10u | C9,C10 | C1206 |
| 6 | RS485 | H2 | HDR-F-2.54_1X4 |
| 7 | DS18B20 | H3 | HDR-F-2.54_1X3 |
| 8 | LED-0805_R | 485-RX,485-TX,PWR | LED0805_RED |
| 9 | MMBT2222ALT1G | Q1 | SOT-23-3_L2.9-W1.3-P1.90-LS2.4-BR |
| 10 | TL431BIDBZR | U1 | SOT-23-3_L2.9-W1.3-P1.90-LS2.4-BR |
| 11 | 1k | R1 | R1206 |
| 12 | 10k | R3,R5,R6,R7 | R1206 |

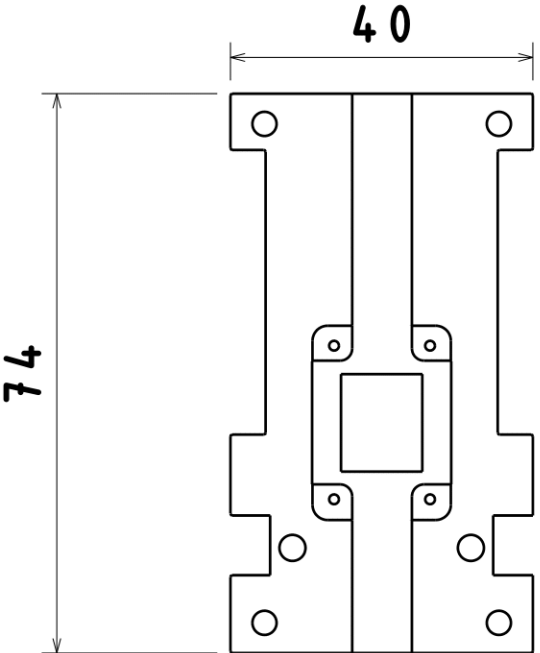
| | | | |
|----|------------------------------|-------------------------|------------------------------------|
| 13 | | 10 R8,R9 | R1206 |
| 14 | 4.7K | R10,R11,R13,R14,R15,R20 | R1206 |
| 15 | | 120 R12 | R1206 |
| 16 | 1K | R17,R18,R19 | R1206 |
| 17 | 20KΩ | R2 | RES-ADJ-TH_3362P |
| 18 | LMP7721MAX/NOPB | U2,U3 | SOIC-8_L4.9-W3.9-P1.27-LS6.0-BL |
| 19 | DFR1117 Beetle ESP32 C6 Mini | U4 | BEETLE BOARDS THT |
| 20 | AMS1117-5.0RG | U6 | SOT-223-3_L6.4-W3.5-P2.30-LS7.0-BR |
| 21 | MAX485ECSA-T | U7 | SOIC-8_L5.0-W4.0-P1.27-LS6.0-BL |

Amperometric_Sensor PCB with SMD components

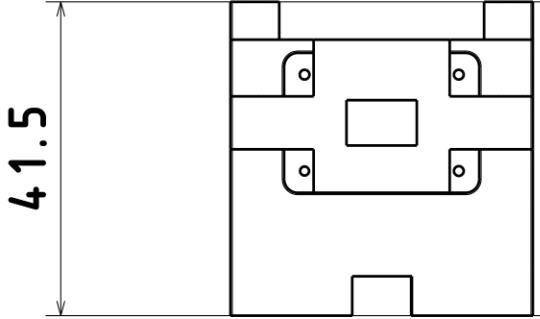


| ID | Name | Designator |
|----|----------------------|-------------------------|
| 1 | 10k | R1,R2,R5,R6,R7 |
| 2 | HDR-F-2.54_1x2 | 5V |
| 3 | LED-0805_R | L |
| 4 | 0.1u | C4,C5 |
| 5 | ELECTRODE CONNECTION | H1 |
| 6 | HDR-F-2.54_1x4 | H3 |
| 7 | | 100 R4 |
| 8 | 1K | R19 |
| 9 | LMP91000SDE/NOPB | U2 |
| 10 | ADS1115IDGST | U5 |
| 11 | 1-1337543-0 | BNC |
| 12 | 0.1u | C1,C2,C3,C4,C5,C11 |
| 13 | 10k | R3,R5,R6,R7 |
| 14 | 4.7K | R10,R11,R13,R14,R15,R20 |

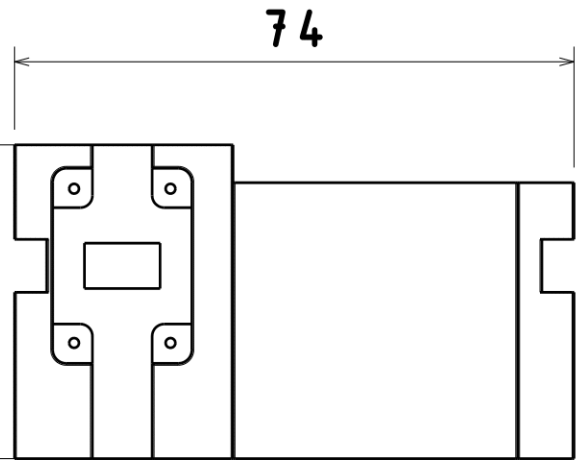
Cuvette Setup for Colour Sensor



Bottom view
Scale: 1:1

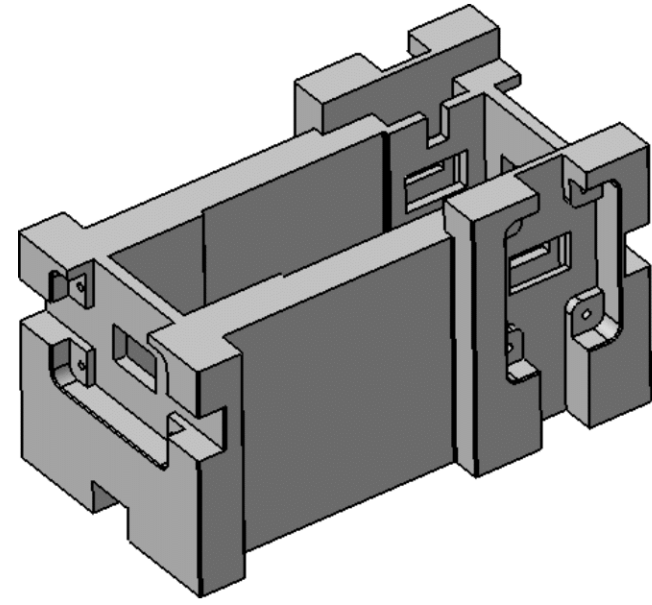


Front view
Scale: 1:1

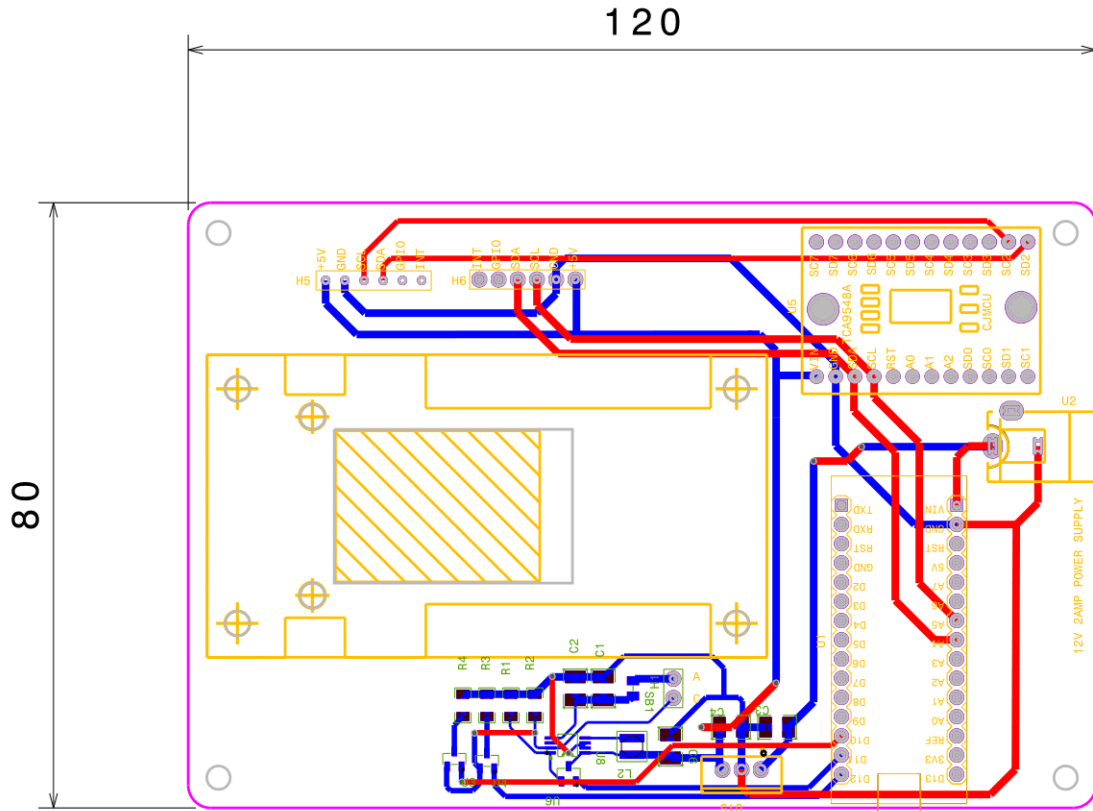


Left view
Scale: 1:1

Isometric view
Scale: 1:1



Main PCB for colour sensor with components



| ID | Name | Designator | Footprint |
|----|-----------------|----------------|-----------------------------------|
| 1 | Adafruit AS7341 | H5,H6 | HDR-F-2.54_1X6 |
| 2 | ARDUINO_NANO | U1 | COMM-TH_ARDUINO_NANO |
| 3 | POWER-JACK | U2 | DC-IN-TH_POWER-JACK |
| 4 | L7805CV-DG | U15 | TO-220-3_L10.0-W4.5-P2.54-L |
| 5 | cjmcu tca9548a | U5 | CJMCMU-TCA9548A |
| 6 | HDR-F-2.54_1x2 | H1 | HDR-F-2.54_1X2 |
| 7 | DMN2050L | U3,U4,U6 | SOT-23-3_L2.9-W1.3-P1.90-LS2.4-BR |
| 8 | MCP1643T-I/MS | U8 | MSOP-8_L3.0-W3.0-P0.65-LS4.9-BL |
| 9 | 744025004 | L2 | WE-TPC_282892 |
| 10 | C1210 | C1,C2,C3,C4,C6 | C1210 |
| 11 | 1m | R1 | R1206 |
| 12 | | 2.4 R2 | R1206 |
| 13 | | 4.7 R3,R4 | R1206 |

