

D

C

B

A

4

3

2

1

PRE-SHIPMENT INSTRUCTIONS:

- VERIFY STICKER WITH UNIQUE ID NUMBER IS APPLIED ON SHORT SIDE OF TASK BOARD NEAREST TO CONTROLLER.
- VERIFY TWO PAIRS OF VELCRO STRIPS ARE APPLIED ON THE BOTTOM OF THE TASK BOARD ON EACH LONG SIDE.
- INCLUDE IN PACKAGE TA NEW MULTIMETER TO BE USED WITH THE BRING-YOUR-OWN-DEVICE CHALLENGE.

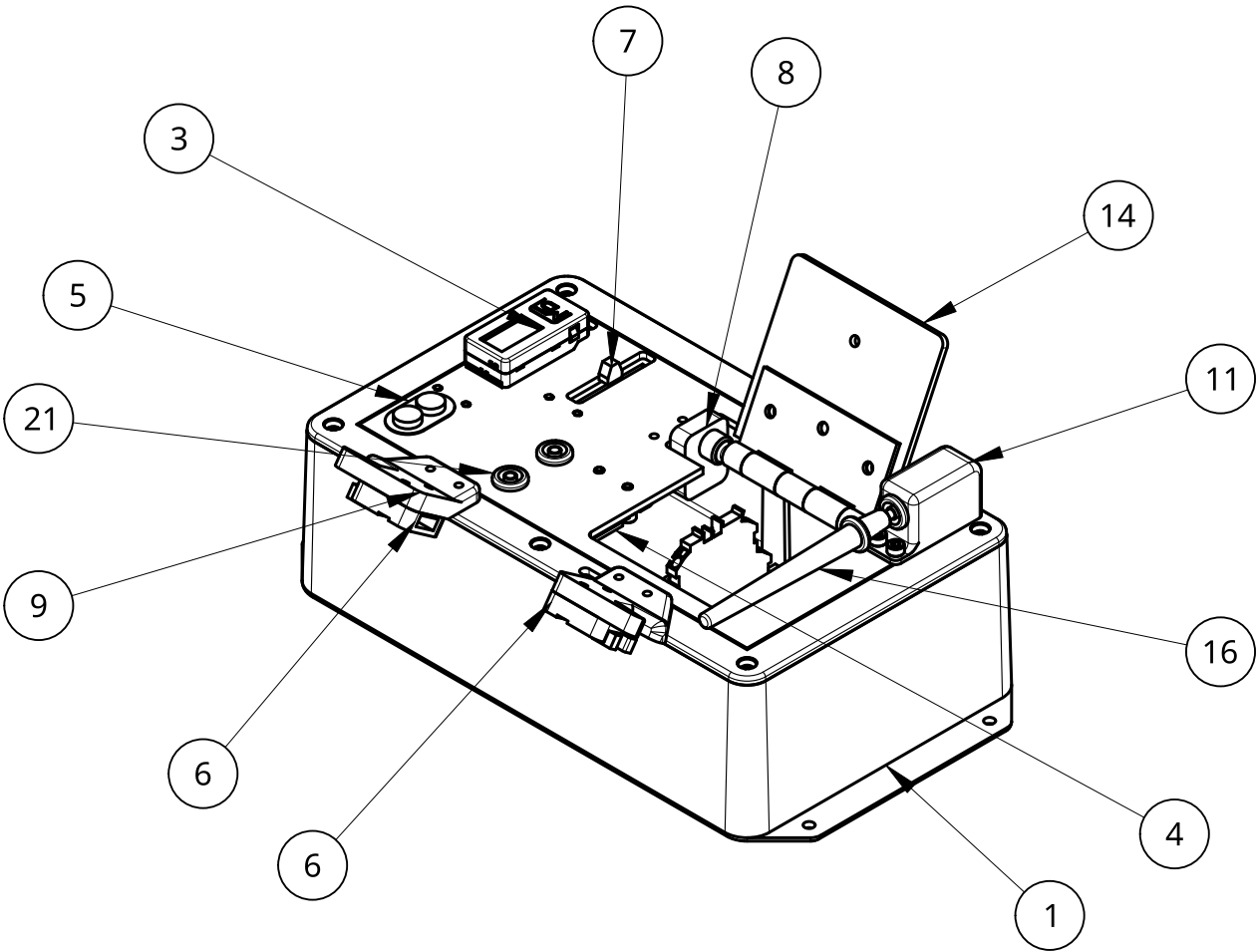
| Item | Quantity | Part number | Description |
|------|----------|-------------|---------------------------------|
| 1 | 1 | | Project Box |
| 2 | 8 | | SHCS M4x10mm |
| 3 | 1 | | M5StickCPlus Microcontroller |
| 4 | 1 | | PbHub Unit |
| 5 | 1 | | Dual Button Unit |
| 6 | 2 | | Photo Int Unit |
| 7 | 1 | | Potentiometer Fader Unit |
| 8 | 1 | | Angle Measurement Unit |
| 9 | 1 | | Cable Wrap Post Left |
| 10 | 1 | | Cable Wrap Post Right |
| 11 | 1 | | Probe Holder |
| 12 | 1 | | Angle Sensor Mounting Bracket |
| 13 | 1 | | Metall Hinge |
| 14 | 1 | | Door |
| 15 | 1 | | Door Hinge Mounting Adapter |
| 16 | 1 | | Probe Tip |
| 17 | 1 | | Backplane |
| 18 | 1 | | DIN Rail Terminal Block 1-Level |
| 19 | 1 | | Top-Hat Rail 135mm |
| 20 | 1 | | DIN Rail Terminal Block 2-Level |
| 21 | 3 | | Banana Plug Port |
| 22 | 3 | | Banana Plug Port Nut |

4

3

2

1



D


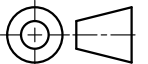
C

B

A

TASK BOARD PROTOCOL:

1. User presses the Trial Start Button to begin a recorded trial.
2. Robot locates the task board in the workspace and pressed the Blue Button. The screen is updated with a new setpoint value.
3. Robot reads the setpoint value off the screen and moves the slider to match the value.
4. Robot picks up probe cable and plugs it into the open test point on the box.
5. Robot opens up the hinged door and uses the probe to test circuit inside box.
6. Robot routes the cable of the probe and replaces it back on the mount.
7. Robot presses the Trial Stop Button to end the recorded trial.

| | | | | | | |
|--|----------|----------|------------|---|-----------------------------------|------------------------|
| UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS ANGULAR = ± ° SURFACE FINISH  DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS THIRD ANGLE PROJECTION  | | NAME | DATE | TITLE Top Level Assembly Competition Task Board Robothon 2023 | | |
| | DRAWN | PETER SO | 01/25/2023 | | | |
| | CHECKED | | | | | |
| | APPROVED | | | | | |
| | | | | SIZE B | DWG NO. 2022-12-01-A001 | REV. 1 |
| | | MATERIAL | FINISH | SCALE 1:3 | WEIGHT | SHEET 1 of 1 |