The root directory for PhysWatt on the Qosain cloud is:

Type B / PhysWatt / Machining Packages /

## **Mechanical:**

Following files are to be laser cut on the white acrylic sheets. These files can be found in <u>... Minimal</u> / <u>Mechanical / Cutting Files</u> directory. Also, the source files can be found at <u>... Source / Mechanical / Cutting Files</u>

| Part   | File name (.dxf)                    | No. of units<br>in one dxf<br>file | Acrylic Sheet<br>Size (mm x mm) |  |  |
|--|-------------------------------------|------------------------------------|---------------------------------|--|--|
|  | Single                              |                                    |                                 |  |  |
| PhysWatt<br>Front, Back,<br>Left, Right<br>sides | 1x_Acrylic_Plate_1.8mm_cutting.dxf  | 1                                  | 193 x 76                        |  |  |
| PhysWatt Top,<br>Bottom sides                    | 1x_Acrylic_Plate_3.6mm_cutting.dxf  | 1                                  | 630 x 220                       |  |  |
| Batch  |                                     |                                    |                                 |  |  |
| PhysWatt<br>Front, Back,<br>Left, Right<br>sides | 12x_Acrylic_Plate_1.8mm_cutting.dxf | 12                                 | 1200 x 640                      |  |  |
| PhysWatt Top,<br>Bottom sides                    | 6x_Acrylic_Plate_3.6mm_cutting.dxf  | 6                                  | 1150 x 900                      |  |  |

Following parts are to be printed on 3D resin printer. These files can be found in ... Minimal / Mechanical / 3D Resin Printer Files directory. Also, the source files can be found at ... Source / Mechanical / Lychee Scene Files

| Part                | File name (.ctb)         | No. of parts in one ctb file | Printing<br>time | Resin<br>Quantity<br>(ml) |  |
|---------------------|--------------------------|------------------------------|------------------|---------------------------|--|
|                     | Single                   |                              |                  |                           |  |
| PhysWatt<br>Knobs   | PhysWatt_Knob_x2.ctb     | 2                            | 58<br>minutes    | 3.75                      |  |
|                     | Batch                    |                              |                  |                           |  |
| PhysWatt<br>Knobs   | PhysWatt_Knobs_x8.ctb    | 8                            | 58<br>minutes    | 15                        |  |
| PhysWatt<br>Buttons | PhysWatt_Buttons_x14.ctb | 14                           | 38<br>minutes    | 15                        |  |

Following files are to be printed on 3D FDM printer. These files can be found in ... Minimal / Mechanical / 3D FDM Printer Files directory. Also, the source files can be found at ... Source / Mechanical / Cura Scene Files

**Note:** The Corner Stacking Blocks files are located in <u>Type B / Common / Corner Stacking</u> <u>Blocks / Machining Packages / Minimal</u>

| Part   | File name (.x3g)      | No. of parts in one x3g file | Printing<br>time | PLA<br>length<br>(m) |
|--|-----------------------|------------------------------|------------------|----------------------|
| PhysWatt<br>Adapter<br>Clamps                        | Adapter_Clamps_x2.x3g | 2                            | 42<br>minutes    | 3.3                  |
| PhysWatt Potentiome ter and Banana Connector Spacers | Both_Spacer_1_Set.x3g | 2 + 4                        | 10<br>minutes    | 0.8                  |

| PhysWatt<br>Foldable<br>Foot (Base +<br>Hinge) | Foldable_Foot_Base_Hinge_1_Set.x3g | 4+2 | 39<br>minutes         | 3.3 |
|--|------------------------------------|-----|-----------------------|-----|
| Corner<br>Stacking<br>Blocks                   | Corner80mm_x4.x3g                  | 4   | 2 hours 39<br>minutes | 14  |
| Batch  |                                    |     |                       |     |
| Corner<br>Stacking<br>Blocks                   | Corner80mm_x15.x3g                 | 15  | 9 hours 35<br>minutes | 52  |

## **Electrical:**

Following is the list of files to be provided to the JLC PCBs. These files can be found at ... <u>Minimal / Electrical / PhysWatt Sent To JLC</u>

<u>These are the zip files containing all the gerber data for the JLC PCBs to manufacture PhysWatt PCBs</u>

| File name              | File description               | No of PCBs in each file |
|------------------------|--------------------------------|-------------------------|
| BackPCB - CADCAM.ZIP   | Gerber data for PhysWatt Back  |                         |
|                        | РСВ                            |                         |
| FrontPCB - CADCAM.ZIP  | Gerber data for PhysWatt Front | 1                       |
|                        | РСВ                            | 1                       |
| DriverPCB - CADCAM.ZIP | Gerber data for PhysWatt       |                         |
|                        | Driver PCB                     |                         |

Also, all the source files can be found at ... Source / Electrical

## Appendix A:

| Bill of Materials for PhysTherm (Electrical) |      |       |           |  |  |
|--|------|-------|-----------|--|--|
| Item name                                    | Link | Count | Cost (Rs) |  |  |
|  |      |       |           |  |  |
|  |      |       |           |  |  |
|  |      |       |           |  |  |
|  |      |       |           |  |  |
|  |      |       |           |  |  |
|  |      |       |           |  |  |
|  |      |       |           |  |  |
|  |      |       |           |  |  |