

rBot

1x Ikea MALM

3D printed Parts

3x Part_X_1.STL
3x Part_X_2.STL
27x Part_X_3.STL
18x Part_X_4.STL
18x Part_X_5.STL
1x Part_X_6.STL
1x Part_X_7.STL
8x Part_X_8.STL

1x Part_Y_1.STL
1x Part_Y_1.STL mirrored
1x Part_Y_2.STL
1x Part_Y_2.STL mirrored
1x Part_Y_3.STL
1x Part_Y_3.STL mirrored

1x Part_Z_1.STL
1x Part_Z_2.STL
1x Part_Z_3.STL
1x Part_Z_4.STL
1x Part_Z_5.STL

35x Part_ECX_1.STL
1x Part_ECX_2.STL
1x Part_ECX_3.STL
3x Part_ECX_4.STL

25x Part_ECY_1.STL
1x Part_ECY_2.STL
1x Part_ECY_3.STL

2x Part_B_1.STL
2x Part_B_2.STL
2x Part_B_3.STL
2x Part_B_4.STL
2x Part_B_4.STL mirrored
2x Part_B_5.STL
4x Part_B_6.STL
2x Part_B_7.STL
2x Part_B_7.STL mirrored

1x Part_A_1.STL
1x Part_A_2.STL
1x Part_A_3.STL
1x Part_A_4.STL
1x Part_A_5.STL
1x Part_A_6.STL
1x Part_A_7.STL

Electronic Components

4x Stepper motor (Wantai
42BYGHW609)
4x Pololu DRV8825 Stepper Driver
1x Arduino Mega 2560
1x Ramps 1.4
1x Raspberry Pi B (optional)
1x Raspberry Pi Camera (optional)
3x Mechanical Endstop Switches
3x 40mm fans
1x Power Supply LC6650GP3

Mechanical Components

4x 380mm x 8mm Shaft
3x 920mm x 10mm Shaft
2x 140mm x 8mm Shaft
1x M5 x 160mm threaded rod
12x LM8UU Bearing
4x LM10UU - OP Bearing
3x GT2 Timing Pulley - 16 Tooth
6x Reely Bearing 19mm x 5mm x 6mm
2x F605 ZZ Bearing 14mm x 5mm x 5mm
2m GT2 Belt

Screws and Nuts

M3 x 8mm Screw
M3 x 16mm Screw
M3 x 20mm Screw
35x M3 x 30mm Screw
M3 Nut
M3 Locknut
6x M5 x 20mm Screw
6x M5 Nut
8x M5 Locknut
12x Washer 25mm x 5.3mm x 1.5mm

Others

6m 10 Pin Ribbon Cable
20m 0,2mm² Wire
50m 0,14mm² Wire
ca. 3kg Pla Filament
perfboard
header pins

Mill

tools you need

3D printed Parts

- 1x Part_MM_1.STL
- 2x Part_MM_2.STL
- 2x Part_MM_3.STL
- 4x Part_MM_4.STL
- 1x Part_MM_5.STL
- 1x Part_MM_6.STL
- 1x Part_MM_7.STL

- hammer
- hex keys
- soldering iron
- side cutters
- pliers
- Drill
- 3mm Drill Bit

Electronic Components

- 1x Arduino Nano
- 1x Brushless Motor BE2208-1070KV
- 1x DYS Simone 30A Brushless Speed Controller 2-5s

Mechanical Components

- 2x UBC Bearing 608 2Z
22mm x 8mm x 7mm
- 1x Collet Chuck ER11
- 1x C8-ER11A-100L
- 1x milling cutter
- 1x T5 185mm Belt
- 1x Shaft Collar 8mm

Screws and Nuts

- 2x M5 x 30mm Screw
- 2x M5 x 20mm Screw
- 10x M3 x 10mm Screw
- 4x M3 Locknut
- 5x M3 x 3mm Set Screw

Others

- 10m 2,5mm² Wire
- 4m tube 16mm
- perfboard
- 3-pin 2.54mm female header
- ca. 300g PLA Filament

Pen Holder

- 1x pen_holder.STL
- 2x M3 x 20mm Screw
- 2x M5 x 20mm Screw
- 4x M3 Nut