

Parts list

28-byj-48 stepper motor	3
SG90 servo motor	1
Limit switch	3
Tact switch (with LED)	2
NPN transistor (2SC1213, 2SC2001 etc.)	12
Diode (for freewheel, $V_D \sim 0.6V$)	12
Resistor (1k ohm)	12
Resistor (5k ohm)	4
Potentiometer (10k ohm)	2
Micro USB type-A adaptor	1
2.54mm pitch universal circuit board	1
Breadboard	1

You can 3D-print “Little robot arm” on <https://www.thingiverse.com/thing:970881>.

I 3d-printed using Ender3-s1 plus for about 12 hours. I used PLA+ filament.

I bought 28-byj-48 stepper motor (5VDC) because I wanted to use a 5VDC smartphone charger.

You will need a lot of M3 screws and nuts.