Bill Of Materials for: [Practicum Group 5] [TEAM NAME]

Last modified: [10/31/2022] PCB version: [PCB VERSION #]

BOM revision: [BOM REVISION #1] P/NP = Place/Not Place (components marked NP are not stuffed on the board)

Cnt	Part References	P/NP	Mfg	Device	Mfg PN
1	U4	1	Microchip	ATMEGA328P-PU	ATMEGA328P-PU
1	U\$1	1	Shinano Kensl	Stepper Motor	STP-42D201-37
1	U2	1	Pololu	A4988_STEPPER_MOTOR_DRIVER_	1182
1	U\$4	1	Parallax	Single Relay Board	27115
2	IC1, IC2	1	Texas Instrum	LM7805S/NOPB	LM7805S/NOPB
1	U\$2	1	Crystalfontz	16x2 White on Blue Character LCD	CFAH1602B-TMI-JT
1	U\$3	1	Parallax	KEYPAD4X4	27899
		-			
1	D2		Würth Elektror	LEDCHIP-LED0805	150080GS75000
1	SW1	1	C&K	SWITCH-MOMENTARY-2SMD	RS-187R05A2-DS MT RT
1	SW2	1	C&K	SWITCH-MOMENTARY-2SMD	RS-187R05A2-DS MT RT
1	X1	1	ECS	CRYSTALSMD-HC49UP	ECS-160-18-5PX-TR
2	R5, R6	1	Yageo	R-US_R0805	RC0805FR-071KL
2	R1, R7	1	Yageo	R-US_R0805	RC0805FR-0710KL
3	R2, R3, R4	1	Yageo	R-US_R0805	RC0805FR-071KL
2	C11, C12	1	Samsung	C-EUC0805K	CL21B104KBCNNNC
3	C4, C5, C6		Samsung	C-EUC0805K	CL21B104KBCNNNC
1	C1	1	Samsung	C-EUC0805K	CL21B104KBCNNNC
1	C10	1	Samsung	C-EUC0805K	CL21B104KBCNNNC
1	C13		Samsung	C-EUC0805K	CL21B104KBCNNNC
1	C7		Samsung	C-EUC0805K	CL21C180JBANNNC
1	C8		Samsung	C-EUC0805K	CL21C300JBANNNC
1	J2	1	Sullins	PINHD-1X6	PRPC006SAAN-RC

1 J1 Harwin PINHD-2X3 M20-9980345

## **VERSION INFO**

Rev Date Notes

1.0r1 2020-11-19
1.0r0 2020-11-12
Cleaned up parts, rough draft of board
Initial BOM. Not everything chosen, lots wrong. Mostly just exported from EAGLE.

Description	Dist	Dist Part Number	Cost Ea.	Cost Total
MICROCONTROLLER	1			
12 Volt 1.8 Step Angle Bipolar Stepper Motor	1			
Stepper motor controler; IC: A4988; 1A; Uin mot: 8÷35V	1			
Single Relay Board				
IC REG LINEAR 5V 1.5A				
16x2 White on Blue Character LCD				
16-button Keyd				
LED				_
Various NO switches- pushbuttons, reed, etc				
Various NO switches- pushbuttons, reed, etc				
Crystals (Generic)				

RESISTOR, American symbol RESISTOR, American symbol RESISTOR, American symbol CAPACITOR, European symbol

PIN HEADER

## PIN HEADER