Bill Of Materials for: PRACTICUM GROUP THREE

Last modified: December 6th, 2022

PCB version: One

BOM revision: ONE P/NP = Place/Not Place (components marked NP are not stuffed on the board)

Cnt	Part References	P/NP	Mfg	Mfg PN	Description	Dist
1	MP1	Р	Arduino	1050-1024-ND	Arduino Uno REV3 [A000066]	Amazon
1	SW_SPST	Р	E-Switch	EG1218	3 Pin Verticle Slide Switch	Digi-Key
1	DISP	Р	HiLetgo	03-01-1498	SPI Serial Interface Adapter 1602 LCD Display	Amazon
2	BS	NP	Duracell	9V-MN1604	Battery 9V Alkaline	Digi-Key
1	CLP	Р	<b>Keystone Electronics</b>	2242	9V Battery Clip Connector to Breadboard	Digi-Key
1	SW1	Р	Taiss	KY-040	Rotary Encoder Module with Knob	Amazon
4	CLP	Р	<b>Keystone Electronics</b>	232	BATT CONN SNAP 9V 1 CEL 4" LEADS	Digi-Key
2	N/A	Р	Preci-dip	801-87-032-10-001101	Dupoint header pins (straight)	Mouser
2	N/A	Р	Preci-dip	801-87-036-20-001101	Dupoint header pins (90 degree)	Mouser
1	WIR	NP	ELEGOO	EL-CP-004	Breadboard Wire Male-Male Male-Female Female-Female	Amazon
4	PCB	Р	OSH Park		PCB Boards	Oshpark

RevDateNotes1.Or12022-12-07Finalizing for presentation1.Or02022-11-09Cleaned up parts, rough draft of board

Bill Of Materials for: PRACTICUM GROUP THREE

Last modified: December 6th, 2022

PCB version: One

BOM revision: ONE P/NP = Place/Not Place (components marked NP are not stuffed on the board)

Cnt	Part References	P/NP	Mfg	Mfg PN	Description	Dist
					Arduino Uno:	
					https://www.amazon.com/Arduino-A000066-ARDUINO-UNO	-R3/dp/B008C
					LCD:	
					https://www.amazon.com/HiLetgo-HD44780-I2C1602-Interfa	ce-Backlight/c
					Rotary Encoder:	
					https://tinkersphere.com/buttons-switches/3045-rotary-encoder-modul	
					OR	
					https://www.amazon.com/Taiss-KY-040-Encoder-15%C3%97	<u> 16-5-Arduino/</u>
					^this one has part number and model number, use whicheve	r is easier ig
					Battery clip connector:	
					https://www.digikey.com/en/products/detail/keystone-elect	ronics/232/30
					^assume we're getting like 4 of these	
					90 degree Dupont header pins - male to female:	
					https://www.mouser.com/ProductDetail/Preci-dip/801-87-03	36-20-001101

Bill Of Materials for: PRACTICUM GROUP THREE

Last modified: December 6th, 2022

PCB version: One

BOM revision: ONE P/NP = Place/Not Place (components marked NP are not stuffed on the board)

Cnt	Part References	P/NP	Mfg	Mfg PN	Description	Dist
					and the straight ones	
					https://www.mouser.com/ProductDetail/Preci-dip/801-87-032-10-00110	

Cost Ea.	<b>Cost Total</b>
\$28.50	\$28.50
\$0.76	\$0.76
\$9.99	\$9.99
\$2.46	\$4.92
\$1.16	\$1.16
\$9.99	\$9.99
\$0.55	\$2.20
\$3.26	\$6.52
\$5.28	\$10.56
\$6.98	\$6.98
\$9.00	\$36.00
TOTAL:	\$117.58
	\$28.50 \$0.76 \$9.99 \$2.46 \$1.16 \$9.99 \$0.55 \$3.26 \$5.28 \$6.98 \$9.00

Dist Part Number Cost Ea. Cost Total

dp/B07W5KC65S/ref=sr 1 1 sspa?crid=3132CD12VX2F8&keywords=lcd+display+1602&qid=1670480013&sprefix=lcd+display+1602%2Caps%2C134&sr=8-1-spons&ps

with-knob.html

 $\underline{dp/B07F26CT6B?source=ps-sl-shoppingads-lpcontext\&ref\_=fplfs\&psc=1\&smid=A2VILSBUHD1UD8}$ 

3804

?qs=q5BRkYolQ3j1LJ%252BvAZHwNw%3D%3D

Dist Part Number Cost Ea. Cost Total

?qs=FtMuP6KVi2RAkveJlUgcfA%3D%3D

49e3-b3f9-63546bb79c92&pf\_rd\_r=DF4K1JTKMVKESNFS74GY&pd\_rd\_wg=zxawg&pd\_rd\_r=781a8472-31b9-4bd2-9759-74ff0ebfd508&pd\_rd\_i=B008GRT\_c=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEySUdTRjRaVDZHMzE0JmVuY3J5cHRIZEIkPUEwNjAzNjU1MlZVWjg3RU85RTFHJmVuY3J5cHRIZEFkSWQ9QTA4

SV6&psc=1

<u>IMDMwMjIyQUQ0QUxMR1JRN1IZJnd</u>;