## **Bill of Materials**

**Year:** 2025

Semester: Spring

Team #: 1

**Project Name:** Electronic Skee Ball

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Project Component	PCB	
Description	ID	Qty
I2S IC Amplifier	1	1
8- Ohm speaker	2	1
Joystick	3	1
Servo Motor	4	1
DC Motor	5	1
Talon SRX	6	1
Ultrasonic Sensor	7	5
24V 10A Power Supply	8	1
24V to 6V Voltage Converter	9	1
24V to 5V Voltgage Converter	10	1
4-Line Character Display	11	1
AND Gate	12	1
Linear Drop-Off Voltage Regulator	13	1
8-Bit Shift Register	14	2
Microcontroller	15	1

Note: Do not list misc. discrete parts (resistors, caps, etc.) such as decoupling caps and ESD protection curr

Value	Package		200 2
(Ohm, etc.)	(type or size)	Manufacturer	Mfg. Part #
N/A	0.8" × 0.7" × 0.1"	Adafruit	MAX98357A
N/A	Off-board	Dayton Audio	PS95-8
N/A	34mm x 26mm x 32mm	HiLetgo	3-01-0492-1
N/A	1.57"x0.8"x1.59"	Hiwonder	HPS-2018
N/A	3.7" x 1.65" x 0.7"	Mabuchi	RS-775
N/A	Off-board	CTR Electronics	217-4245
N/A	Off-board	GeeekPi	HC-SR04
N/A	Off-board	ALITOVE	ALT-2410T
N/A	0.7"x0.7"x0.31"	Pololu	D24V22F6
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N/A	Off-board	Newhaven Dislay Intl	NHD-0440AZ-FL-YBW
N/A	0.775"x0.250"x0.2"	Texas Instruments	SN74HC08N
N/A	1.105"x0.4"x0.175"	Texas Instruments	LM1117T-3.3/NOPB
N/A	0.775"x0.250"x0.2"	Texas Instruments	SN74HC595DR
N/A	0.6299"x0.6299"x0.0630	STMicroelectronics	STM32F091CBT6TR

ent limiting resistors.

Supplier	Supplier Part #	Approximate Price (Qty 1)
Adafruit	3006	\$5.95
Parts Express	295-349	\$27.98
Amazon	B00P7QBGD2	\$6.29
Amazon	B0B7R5WKKK	\$13.99
DigiKey	315-1157-ND	\$21.49
VEX Robotics	217-8080	\$89.99
Adafruit	4007	\$3.99
ALITOVE	ALT-2410T	\$39.99
Pololu	2859	\$11.95
Pololu	2858	\$12.95
DigiKey	NHD-0440AZ-FL-YBW	\$28.59
DigiKey	296-1570-5-ND	\$0.60
DigiKey	LM1117T-3.3/NOPB-ND	\$1.59
DigiKey	296-14857-2-ND	\$0.26
DigiKey	497-STM32F091CBT6TR-ND	\$4.82