Bill Of Materials for: TEAM 7 Anti-Squirrel Birdwatch Feeder

Last modified: 20-11-2024 PCB version: [PCB VERSION #] BOM revision: BOM REVISION A

P/NP

= Place/Not Place (components marked NP are not stuffed on the board)

Cnt	Part References	P/NP	Mfg	Mfg PN	Description	Dist	Dist Part Number	Cost Ea.	Cost Total
1	XIAO1	P	Seeed Studio	113991115	Seeed Studio XIAO ESP32S3 Sense - 2.4GHz Wi-Fi, BLE 5.0, OV2640 camera sensor, digital microphone, 8MB PSRAM, 8MB FLASH, battery charge supported, rich Interface, IoT, embedded ML	Seeed Studio	113991115	\$13.99	\$13.99
1	C1	Р	Samsung Electro-Mechanics	CL21B104KBCNNNC	100 nF cap	DigiKey	1276-1003-1-ND	\$0.10	\$0.10
1	C2	Р	Samsung Electro-Mechanics	CL21A475KAQNNNE	4.7 uF cap	DigiKey	1276-1244-1-ND	\$0.10	\$0.10
1	M1		DFRobot	SER0043	SERVOMOTOR RC 4.8-6V	DigiKey	1738-1300-ND	\$4.00	\$4.00
			KOA Speer Electronics, Inc.	RK73B2ATTD101J	RES 100 OHM 5% 1/4W 0805	DigiKey	2019-RK73B2ATTD101JCT-ND	\$0.10	\$0.10
1		Р							
1		Р	KOA Speer Electronics, Inc.	RK73B2ATTD472J	RES 4.7K OHM 5% 1/4W 0805	DigiKey	2019-RK73B2ATTD472JCT-ND	\$0.10	
1	R1	Р	YAGEO	RC1206FR-07100RL	RES 100 OHM 1% 1/4W 1206	DigiKey	311-100FRCT-ND - Cut Tape (CT)	\$0.10	
1		Р	ams-OSRAM USA INC.	LG R971-KN-1-0-20-R18	LED GREEN DIFFUSED 0805 SMD	DigiKey	475-LGR971-KN-1CT-ND	\$0.22	
1	U1	Р	STMicroelectronics	VL53L4CXV0DH/1	SENSOR OPTICAL 10-5000MM I2C	DigiKey	497-VL53L4CXV0DH/1CT-ND	\$4.45	
1		Р	Alpha & Omega Semiconductor Inc	AO3400A	N-Channel 30 V 5.7A (Ta) 1.4W (Ta) Surface Mount SOT-23-3	DigiKey	785-1000-1-ND	\$0.46	
1			MakerFocus	UO381121YVC	MakerFocus 4pcs 3.7V 1100mAh Lithium Rechargeable	Amazon	B0867KDMY7	\$4.05	\$4.05
1			WWZMDiB	NA	1KG Load Cell and Amplifier	Amazon	B0BLNR4S1P	\$6.99	
1			DFRobot	DFR0559	Solar Power Manager 5V	DFRobot	DFR0559	\$7.90	\$7.90
1	Q1	Р	Diodes Incorporated	DMN2075U-7	MOSFET N-CH 20V 4.2A SOT23-3	DigiKey	DMN2075U-7DICT-ND - Cut Tape (CT)	\$0.34	\$0.34
1			DFRobot	FIT0600	Semi Flexible Monocrystalline Solar Panel (6V 1A)	DFRobot	FIT0600	\$17.50	\$17.50
2	R4, R5	Р	Panasonic Electronic Components	ERJ-6GEYJ103V	10 kohm resistor	DigiKey	P10KACT-ND	\$0.10	\$0.20
2	R2, R3	Р	YAGEO	ERJ-6GEYJ362V	3.6 kohm resistor	DigiKey	P3.6KACT-ND	\$0.10	\$0.20
1		Р	Stackpole Electronics Inc	RNCP0805FTD10K0	RES 10K OHM 1% 1/4W 0805	DigiKey	RNCP0805FTD10K0CT-ND	\$0.10	\$0.10
1		Р	Stackpole Electronics Inc	RNCP0805FTD150R	RES 150 OHM 1% 1/4W 0805	DigiKey	RNCP0805FTD150RCT-ND	\$0.10	\$0.10
1	J1	Р	Samtec Inc.	TS-102-T-A	CONN HEADER VERT 2POS 2.54MM	DigiKey	SAM1112-02-ND	\$0.95	\$0.95
1	M1	Р	Samtec Inc.	TS-103-T-A	CONN HEADER VERT 3POS 2.54MM	DigiKey	SAM1112-03-ND	\$1.21	\$1.21
1	J2	Р	Samtec Inc.	TS-104-T-A	CONN HEADER VERT 4POS 2.54MM	DigiKey	SAM1112-04-ND	\$1.46	\$1.46
									\$0.00
									\$0.00

\$0.00 **TOTAL:** \$64.62

VERSION INFO

Rev Date Notes

Rev-B 2024-12-04

Initial BOM; needs finalization upon confirmation of circuit schematic.

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