

List of Components	Reference Designators	Quantity	Manufacturer	DigiKey Part No	Manufacturer Part No	Final Quantity	Cost/unit	Price/Components
IC COLOR SENSOR DGT1 8WSON	U6,U7,U8	3	Rohm Semiconductor	BH1745NUC-E2CT-ND	BH1745NUC-E2	300	1.166	349.8
MOSFET P-CH 20V 1.8A SOT-23	Q4,Q5	2	ON Semiconductor	NTR4101PT1GOSCT-ND	NTR4101PT1G	200	0.1715	34.3
IC MCU 16BIT 32KB FLASH 28SOIC	U4	1	Microchip Technology	PIC24F032GA002-I/SO-ND	PIC24F032GA002-I/SO	100	2.1218	212.18
IC REG LINEAR 3.3V 200MA SMV	U3	1	Toshiba Semiconductor and Storage	TCR2EF33LMCTCT-ND	TCR2EF33LMCT	100	0.14	14
IC I2C SMBUS SWITCH 4CH 16-TSSOP	U5	1	Texas Instruments	295-20968-1-ND	PCA9546APWR	100	1.4085	140.85
RES 10K OHM 1% 1/8W 0603	R8,R10,R14, R6	4	Stackpole Electronics Inc	RNCP0603FTD10K0CT-ND	RNCP0603FTD10K0	400	0.0273	10.92
RES SMD 1K OHM 5% 1/4W 0603	R16,R17,R18,R19,R20, R21, R22, R23, R24, R27, R28,R4	12	Rohm Semiconductor	RHM1.00KADCT-ND	ESR03ZEP1001	1200	0.0462	55.44
RES SMD 47K OHM 1% 1/10W 0603	R25,R26	2	Yageo	311-47.0KHRCCT-ND	RC0603FR-0747K	200	0.0097	1.94
CAP CER 47PF 50V COGNP0 0603	C14, C15	2	KEMET	399-7918-1-ND	C0603C470K5GACTU	200	0.0379	7.58
DIODE SCHOTTKY 20V 1A SOD123L	D3,D4	2	ON Semiconductor	MBR230LSFT1GOSCT-ND	MBR230LSFT1G	200	0.1797	35.94
CAP CER 10UF 6.3V X5R 0603	C9,C10,C16	3	Murata Electronics North America	490-12538-1-ND	GRM188R60J108KE47D	300	0.0599	17.97
CAP CER X8L 16V 1.0UF 10% 0.80MM	C7	1	TDK Corporation	445-175260-1-ND	CGA3E1X8L1C105K080AC	100	0.1746	17.46
CAP CER 0.1UF 50V X7R 0603	C6,C17, C11, C12, C13	5	Samsung Electro-Mechanics	1276-1000-1-ND	CL10B104K88NNNC	500	0.00878	4.39
CAP CER 22UF 6.3V X5R 0603	C8	1	Murata Electronics North America	490-7611-1-ND	GRM188R60J226MEAD	100	0.1001	10.01
RES SMD 470 OHM 1% 1/10W 0603	R2	1	Yageo	311-470HRCCT-ND	RC0603FR-07470RL	100	0.0097	0.97
RES SMD 2K OHM 0.1% 1/10W 0603	R1	1	Panasonic Electronic Components	P2.0KDBCT-ND	ERA-3AE020V	100	0.1173	11.73
CAP CER 4.7UF 6.3V X5R 0603	C3,C5	2	Samsung Electro-Mechanics	1276-1907-1-ND	CL10A475M08NNNC	200	0.0279	5.58
IC CONTROLLER L-IION 4.2V SOT23-5	U1	1	Microchip Technology	MCP73831T-2ACIQTCT-ND	MCP73831T-2ACIQT	100	0.4326	43.26
LED ORANGE CLEAR SMD	D1	1	Lite-On Inc.	160-1413-1-ND	LTST-C170KFKT	100	0.1016	10.16
RES SMD 27 OHM 5% 1/4W 0603	R3	1	Rohm Semiconductor	RHM27DCT-ND	ESR03ZEPJ270	100	0.0318	3.18
CONN HEADER VERT 2POS 2.54MM	P2	1	Harwin Inc.	952-2262-ND	M20-9990246	100	0.0609	6.09
MOSFET N-CH 100V 1A SOT23-3	Q1	1	Diodes Incorporated	ZVN3310ECT-ND	ZVN3310FTA	100	0.4039	40.39
LED GREEN CLEAR 3MM ROUND T/H	D2	1	Würth Electronics Inc	732-5012-ND	151033GSG03000	100	0.194	19.4
BRIDGE RECT 1PHASE 20V 1A MBS-1	D5	1	Micro Commercial Co	MB12S-TPMSCCT-ND	MB12S-TP	100	0.2637	26.37
Total:		51					Total Price	1079.91