

Name	Description	Designator	Manufacturer Part Number 1
Raspberry Pi Zero	Raspberry Pi Zero with Header	BRD1	
100nF 25V	Capacitor	C4	
10uF 25V	Capacitor	C5	
1N4148WS	DIODE GEN PURP 75V 150MA SOD323F	D1, D13, D14, D15, D16, D17, D24, D25, D26, D27	1N4148WS
MMSZ4678T1G	Zener Voltage Regulator, 500 mW, 2-Pin SOD-123, Pb-Free, Tape and Reel	D2, D3	MMSZ4678T1G
BAT54C	Schottky Barrier Diode, 30 V, 3-Pin SOT23, RoHS, Tape and Reel	D4, D5, D10, D18, D21	
MMSZ5226BT1G	Zener Voltage Regulator, 500 mW, 2-Pin SOD-123, Pb-Free, Tape and Reel	D6, D7, D8, D9, D11, D12, D19, D20, D22, D23	MMSZ5226BT1G
282836-2	Female Header, Pitch 5 mm, 1 x 2 Position, Height 10 mm, Tail Length 3.5 mm, Rohs, Bulk	J1, J2, J3, J8, J9, J10, J11, J12, J13, J14, J15, J16, J17, J18, J19, J20, J21	282836-2
JST-S3B-PH-SM4-TB-3_V	JST-S3B-PH-SM4-TB-3_V	J4, J5, J7	
JST-S4B-PH-SM4-TB-3_V	JST-S4B-PH-SM4-TB-3_V	J6	
Jumper	THT Vertical Pin Header WR-PHD, Pitch 2.54 mm, Single Row, 2 pins	P1	61300211121
AO3400A	MOSFET N-CH 30V 5.7A SOT23	Q1, Q2, Q3, Q7, Q8, Q10, Q12, Q13, Q24, Q25, Q26, Q27	
LTV-827S-TA1	OPTOISOLATOR 5KV 2CH TRANS 8-SMD	Q4, Q5, Q6, Q15, Q17	LTV-827S-TA1
FDD86250	MOSFET N-CH 150V 8A DPAK	Q9, Q11, Q14, Q16, Q18, Q19, Q20, Q21, Q22, Q23	FDD86250
700kΩ	Resistor	R1, R6	
10kΩ	Resistor	R2	
100kΩ	Resistor	R3, R7, R8, R9, R11, R12, R17, R18, R21, R22, R23, R24, R27, R28, R32, R33, R34, R36, R39, R40, R43, R44, R47, R48, R51, R52	
4.1kΩ	Resistor	R4, R5, R10	
4.7kΩ	Resistor	R13, R14, R15, R16, R19, R20, R25, R26, R29, R30	
1kΩ	Resistor	R31, R35, R37, R38, R41, R42, R45, R46, R49, R50	
12v to 5v power supply	12V TO 5V buck converter	U1	
	16-Bit, Multi-Channel Delta-Sigma Analog-to-Digital Converter with I2C Interface and On-Board Reference, 8-Pin SOIC 150mil, Extended Temperature	U2	MCP3426A0-E/SN
PCA9685PW,112	16-Channel, 12-Bit PWM Fm+ I2C-Bus LED Controller, 2.3 to 5.5 V, -40 to 85 degC, 28-Pin TSSOP (SOT361-1), RoHS, Tape and Reel	U9	PCA9685PW,112