

Bill Of Materials for ECE298_Lab4

Design Title ECE298_Lab4
Author
Document Number
Revision
Design Created December 15, 2020
Design Last Modified August 3, 2021
Total Parts In Design 83

Notes

Operational Amplifier device (with footprint SOT-23-8) manufacturer is Texas Instruments and stock code at Digikey is LM2904LVDDFR
CMOS 4049 device (with footprint DIL16) manufacturer is Fairchild Semiconductor and stock code at Digikey is CD4049UBCMX
Motor Controller device (with footprint HSOP (8)) manufacturer is Texas Instruments and stock code at Digikey is DRV8871DDAR
LSTTL device (with footprint DIL16) manufacturer is NXP Semiconductors and stock code at Digikey is 74HC238N

0 Modules

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>PCB Package</u>
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Sub-totals:

14 Capacitors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>PCB Package</u>
8	C1-C3,C7-C11	10n	Farnell 499-225	0805_CAP
4	C4-C6,C14	10u	Digikey 445-1371-1-ND	CAPC2012X100
2	C12-C13	100u	Digikey 495-2191-2-ND	CAPMP3528X210

Sub-totals:

31 Resistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>PCB Package</u>
13	R1-R3,R14,R16,R27,R33-R35,R37-R40	100K	Digikey P100KZTR-ND	RESC2012X50
2	R4,R28	300k	Digikey RT0805DRE07300KL-ND	RESC2012X50
4	R13,R17,R29-R30	165k	Digikey RT0805DRE07165KL-ND	RESC2012X50
4	R18,R20,R31-R32	330k	Digikey RT0805DRE07330KL-ND	RESC2012X50
5	R19,R36,R41-R43	200	Digikey 311-200CTR-ND	RESC2012X50
1	R21	255k	Digikey RT0805DRE07255KL-ND	RESC2012X50
2	R22,R26	64.9k	Digikey RT0805DRE0764K9L-ND	RESC2012X50

Sub-totals:

6 Integrated Circuits

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>PCB Package</u>
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1	U1	LM2904LVIDDF	SOT65P275X110-8
2	U3, U7	4049	DIL16
2	U4, U6	DRV8871	SOIC127P600X170-9
1	U10	74HCT238	DIL16

Sub-totals:

16 Transistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>PCB Package</u>
16	Q1-Q4, Q17-Q28	2N7002	Digikey 2N7002NTR-ND	SOT95P230X109-3

Sub-totals:

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<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>PCB Package</u>
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Sub-totals:

16 Miscellaneous

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Stock Code</u>	<u>PCB Package</u>
7	+12V, +3.3V, +5V, GND, PWM1-PWM2, RS	PIN		PIN
2	CN7, CN10	1-534236-9	1-534236-9	ECE298_REVTRANS38DIL-1
1	J1	TBLOCK-M2		TBLOCK-M2
2	J4-J5	26630201RP2	NorComp 26630201RP2	CON2_1X2_HDR_2663
1	J6	26641201RP2	NorComp 26641201RP2	CON12_2X6_HDR_2664
1	J7	26641001RP2	NorComp 26641001RP2	CON10_2X5_HDR_2664
1	J9	27640602RP2	NorComp 27640602RP2	CON6_2X3_HDR_2764
1	J16	26640801RP2	NorComp 26640801RP2	CON8_2X4_HDR_2664

Sub-totals:

Totals:

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