

Motor Controller - Control PCB BOM

Source: /home/nebk/Documents/school/SeniorDesign/motor-controller-2018/motor-controller-hw/motor-controller-hw.sch
Date: Sat 22 Dec 2018 05:15:27 PM CST
Tool: Eeschema 5.0.1
Generator: /home/nebk/programs/EEschema-plugins/bom_csv_grouped_by_value.py
Component Count: 141

Collated Components:	Qty	Reference(s)	Value	Footprint	Datasheet	Digi-key#
Item						
1	7	C101, C104, C105, C214, C306, C411, C416	4u7	Capacitors_SMD_C_0805_HandSoldering	~	732-7628-1-ND
2	29	C102, C201, C204, C205, C206, C207, C208, C209, C210, C211, C301, C302, C303, C304, C305, C311, C401, C402, C403, C404, C405, C406, C407, C408, C409, C412, C413, C414, C415	100n	Capacitors_SMD_C_0805_HandSoldering	~	1276-2444-1-ND
3	1	C103	33u	Capacitor_THT_CP_Radial_D8.0mm_P3.50mm	https://industrial.panasonic.com/www/products/capacitors/aluminum-capacitors/aluminum-cap-lead/fo/EEUFC1J470	P10340-ND
4	4	C202, C212, C213, C307	1u	Capacitors_SMD_C_0805_HandSoldering	~	732-7672-1-ND
5	1	C203	150n	Capacitors_SMD_C_0805_HandSoldering	~	732-7674-1-ND
6	6	C215, C216, C217, C218, C219, C220	100p	Capacitors_SMD_C_0805_HandSoldering	~	1276-1014-1-ND
7	5	C308, C417, C418, C419, C420	10n	Capacitors_SMD_C_0805_HandSoldering	~	732-12169-1-ND
8	2	C309, C310	27pf	Capacitors_SMD_C_0805_HandSoldering	~	1276-2622-1-ND
9	1	C410	470n	Capacitors_SMD_C_0805_HandSoldering	~	732-7670-1-ND
10	1	D101	15V Zener	Diode_SMD-D_SOD-123F	https://www.diodes.com/assets/Datasheets/BZT52HC2V4WF%20-%20BZT52HC47WF.pdf	BZT52HC15WF-7DICT-ND
11	1	D102	D_USB	Diode_SMD-D_SOD-123F	https://www.fairchildsemi.com/datasheets/MB/MBR1020VL.pdf	MBR1020VLC-ND
12	1	D103	Vin	LEDs:LED_0603_HandSoldering	https://katalog.we-online.de/pbs/datasheet/150060RS55040.pdf	732-12015-1-ND
13	1	D104	5V	LEDs:LED_0603_HandSoldering	https://katalog.we-online.de/pbs/datasheet/150060RS55040.pdf	732-12015-1-ND
14	1	D105	3.3V	LEDs:LED_0603_HandSoldering	https://katalog.we-online.de/pbs/datasheet/150060RS55040.pdf	732-12015-1-ND
15	1	D301	CAN_Status	LED_SMD:LED_0603_1608Metric_Pad1.05x0.95mm_HandSolder	https://katalog.we-online.de/pbs/datasheet/150060RS55040.pdf	732-12013-1-ND
16	1	D302	Heartbeat	LED_SMD:LED_0603_1608Metric_Pad1.05x0.95mm_HandSolder	https://katalog.we-online.de/pbs/datasheet/150060RS55040.pdf	732-12015-1-ND
17	1	D303	User_LED	LED_SMD:LED_0603_1608Metric_Pad1.05x0.95mm_HandSolder	https://katalog.we-online.com/led/datasheet/150060VSS5040.pdf	732-12017-1-ND
18	3	F101, F102, F103	50mA PTC	Fuse:Fuse_0603_1608Metric_Pad1.05x0.95mm_HandSolder	https://belfuse.com/resources/CircuitProtection/datasheets/02CM%20Nov2016.pdf	507-1816-1-ND
19	1	J101	CAN	supermileage_footprints:Molex-duraClick-4conn	https://www.molex.com/pdm_docs/sd/5023520200_sd.pdf	WM7171CT-ND
20	1	J102	Throttle	supermileage_footprints:Molex-duraClick-4conn	https://www.molex.com/pdm_docs/sd/5023520200_sd.pdf	WM7171CT-ND
21	1	J103	Motor T	supermileage_footprints:Molex-duraClick-2conn	https://www.molex.com/pdm_docs/sd/5023520200_sd.pdf	WM7169CT-ND
22	1	J104	Tran T	supermileage_footprints:Molex-duraClick-2conn	https://www.molex.com/pdm_docs/sd/5023520200_sd.pdf	WM7169CT-ND
23	1	J105	USB_B_Micro	supermileage_footprints:USB_Micro-B	https://www.amphenol-icc.com/media/wysiwyg/files/drawing/10118194.pdf	609-4618-1-ND
24	1	J106	Extra IO	supermileage_footprints:Molex-UltraFit-14p-vert	https://www.molex.com/pdm_docs/sd/1722981112_sd.pdf	WM11743-ND
25	1	J107	Hall Sensors	supermileage_footprints:MICRO_JST_6	http://www.jst-mfg.com/product/pdf/eng/PH.pdf	455-1708-ND
26	1	J108	CAN_DBG	Connector_PinHeader_2.54mm:PinHeader_1x02_P2.54mm_Vertical	https://media.digikey.com/PDF/Data%20Sheets/Sullins%20PDFs/xRxCzzzSxxN-RC_ST_11635-8.pdf	S1212EC-02-ND
27	1	J109	ABN Encoder	Connector_PinHeader_2.54mm:PinHeader_1x05_P2.54mm_Vertical	https://media.digikey.com/PDF/Data%20Sheets/Sullins%20PDFs/xRxCzzzSxxN-RC_ST_11635-8.pdf	S1212EC-05-ND
28	1	J110	SPI_DBG	Connector_PinHeader_2.54mm:PinHeader_1x04_P2.54mm_Vertical	https://media.digikey.com/PDF/Data%20Sheets/Sullins%20PDFs/xRxCzzzSxxN-RC_ST_11635-8.pdf	S1212EC-04-ND
29	1	J111	Trinamic-Bridge	Connector_PinSocket_2.54mm:PinSocket_2x22_P2.54mm_Vertical	https://drawings-pdf.s3.amazonaws.com/10492.pdf	S7125-ND
30	1	J301	SWD	Connector_PinHeader_2.54mm:PinHeader_1x06_P2.54mm_Vertical	https://media.digikey.com/PDF/Data%20Sheets/Sullins%20PDFs/xRxCzzzSxxN-RC_ST_11635-8.pdf	S1212EC-06-ND
31	1	J302	User USART	Connector_PinHeader_2.54mm:PinHeader_1x03_P2.54mm_Vertical	https://media.digikey.com/PDF/Data%20Sheets/Sullins%20PDFs/xRxCzzzSxxN-RC_ST_11635-8.pdf	S1212EC-03-ND
32	1	J401	Trinamic_TRMI	supermileage_footprints:DF20F-10DP-1V(56)	https://www.hirose.com/product/download?distributor=digikey&type=2d&lang=en&num=DF20F-10DP-1V(56)	H10726CT-ND
33	1	J402	TMC4671 USART	Connector_PinHeader_2.54mm:PinHeader_1x03_P2.54mm_Vertical	https://media.digikey.com/PDF/Data%20Sheets/Sullins%20PDFs/xRxCzzzSxxN-RC_ST_11635-8.pdf	S1212EC-03-ND
34	1	JP201	CAN Term	Connector_PinHeader_2.54mm:PinHeader_1x02_P2.54mm_Vertical	https://media.digikey.com/PDF/Data%20Sheets/Sullins%20PDFs/xRxCzzzSxxN-RC_ST_11635-8.pdf	S1212EC-02-ND
35	1	Q101	Q_PMOS_GDS	Package_TO_SOT_SMD:TO-252-3_TabPin2	http://aosmd.com/res/data_sheets/AOD407.pdf	785-1102-1-ND
36	12	R101, R102, R103, R220, R301, R401, R402, R403, R404, R405, R408, R409	10K	Resistors_SMD-R_0805_HandSoldering	https://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchtrv&DocNm=1773204-3&DocType=DS&DocLang=English	A129761CT-ND
37	1	R104	1K	Resistors_SMD-R_0805_HandSoldering	https://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchtrv&DocNm=1773204-3&DocType=DS&DocLang=English	A129749CT-ND
38	4	R105, R302, R306, R307	330R	Resistors_SMD-R_0805_HandSoldering	http://www.yageo.com/documents/recent/PYu-RC_Group_51_RoHS_L_9.pdf	311-330CRCT-ND
39	5	R201, R202, R203, R204, R205	2K	Resistors_SMD-R_0805_HandSoldering	https://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchtrv&DocNm=1773204&DocType=DS&DocLang=English	A126358CT-ND
40	1	R206	3K9	Resistors_SMD-R_0805_HandSoldering	http://www.yageo.com/documents/recent/PYu-RC_Group_51_RoHS_L_9.pdf	311-390CRCT-ND
41	10	R207, R208, R209, R213, R214, R215, R304, R305, R406, R407	100R	Resistors_SMD-R_0805_HandSoldering	http://www.yageo.com/documents/recent/PYu-RC_Group_51_RoHS_L_9.pdf	311-100CRCT-ND
42	7	R210, R211, R212, R217, R218, R219, R303	4K7	Resistors_SMD-R_0805_HandSoldering	http://www.yageo.com/documents/recent/PYu-RC_Group_51_RoHS_L_9.pdf	311-470KCRCT-ND
43	1	R216	120R	Resistors_SMD-R_0805_HandSoldering	https://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchtrv&DocNm=1773204-3&DocType=DS&DocLang=English	A129738CT-ND
44	1	R410	110K	Resistors_SMD-R_0805_HandSoldering	http://www.yageo.com/documents/recent/PYu-RC_Group_51_RoHS_L_9.pdf	311-110KCRCT-ND
45	1	SW301	Reset	supermileage_footprints:SW_SPST_FSMSM	https://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchtrv&DocNm=1437566-3&DocType=Customer+Drawing&DocLang=English	450-1758-1-ND
46	1	SW302	Boot	supermileage_footprints:SW_SPST_FSMSM	https://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchtrv&DocNm=1437566-3&DocType=Customer+Drawing&DocLang=English	450-1758-1-ND
47	1	SW303	User_SW	supermileage_footprints:SW_SPST_FSMSM	https://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchtrv&DocNm=1437566-3&DocType=Customer+Drawing&DocLang=English	450-1758-1-ND
48	1	U101	AP7361C-33	Package_TO_SOT_SMD:SOT-223	https://www.diodes.com/assets/Datasheets/AP7361C.pdf	AP7361C-33E-13DICT-ND
49	1	U102	D36V6F5	supermileage_footprints:D36V6Fx	https://www.polulu.com/category/247/d36v6x-step-down-voltage-regulators	
50	3	U201, U202, U203	MCP6004	Package_SO:SOIC-14_3.9x8.7mm_P1.27mm	http://ww1.microchip.com/downloads/en/DeviceDoc/21733j.pdf	MCP6004-/SL-ND
51	2	U204, U205	74HC7014	Package_SO:SOIC-14_3.9x8.7mm_P1.27mm	https://assets.nexperia.com/documents/data-sheet/74HC7014.pdf	1727-6342-1-ND
52	1	U206	mcp2562	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm	https://www.nxp.com/docs/en/data-sheet/TJF1051.pdf	568-11881-1-ND
53	1	U301	STM32F303RETx	Package_QFP:LQFP-64_10x10mm_P0.5mm	http://www.st.com/web-site/active/en/resource/technical/document/datasheet/DM00118585.pdf	497-15163-ND
54	1	U401	TMC4671	supermileage_footprints:TMC4671	https://www.trinamic.com/fileadmin/assets/Products/ICs_Documents/TMC4671_datasheet_v1.03.pdf	1460-1302-ND
55	1	X401	IQXO-50	supermileage_footprints:Clock-FOX924	https://www.foxonline.com/pdfs/fox924.pdf	631-1074-1-ND
56	1	Y301	8Mhz	Crystal:Crystal_SMD_HC49-SD_HandSoldering	https://abracon.com/Resonators/labs.pdf	535-10212-1-ND