

Comment	Description	Designator	Footprint	LibRef	Quantity
100n	Non-polarised capacitor	C1, C2, C3, C4, C7, C9, C12, C21, C23, C25, C26, C28, C32, C39	CAPC1608X87N	Capacitor - non polarized	14
1u	Non-polarised capacitor	C5, C10	CAPC2012X88N	Capacitor - non polarized	2
22u	Non-polarised capacitor	C6, C11, C20, C24, C27, C29, C30, C31	CAPC3216X140N	Capacitor - non polarized	8
330u	Polarised capacitor	C8, C19, C38	CAP AL TH D10 L5 H12.5	Capacitor - polarized	3
10n	Non-polarised capacitor	C13, C14, C15, C16, C17, C18, C22, C40, C41	CAPC1608X87N	Capacitor - non polarized	9
27n	Non-polarised capacitor	C33	CAPC1608X87N	Capacitor - non polarized	1
2n	Non-polarised capacitor	C34	CAPC1608X87N	Capacitor - non polarized	1
10p	Non-polarised capacitor	C35	CAPC1608X87N	Capacitor - non polarized	1
100n	Non-polarised capacitor	C36, C37	CAP 1206/3216 - 0.8MM	Capacitor - non polarized	2
MBRS320T3G	Schottky Diode	D1, D2	DIOM7659X265N	Diode Schottky	2
	Schottky Diode	D3	SOD123F	Diode Schottky	1
Device	Schottky Diode, ESD protection diode	D4, D5, D6	DIOM7659X265N	Diode Schottky, Diode ESD	3
ETB 1 [10A]	Fuse	F1	automotive fuse by sd	Fuse 2	1
Main [5A]	Fuse	F2	automotive fuse by sd	Fuse 2	1
1A 30V	Fuse	F3	FUSC_LITTELFUSE_466	Fuse	1
HI-side [20A]	Fuse	F4	automotive fuse by sd	Fuse 2	1
1117-3.3	1.0A Low-Dropout Positive Fixed and Adjustable Voltage Regulators	IC1	SOT230P700X180-4N	ON Semi NCP1117	1
ETB motors	Connector 8 Male	J1	MOLEX_22-27-2081	Connector 8 Male	1
Supply	Connector 8 Male	J2	MOLEX_22-27-2081	Connector 8 Male	1
Hi-out & Vhall_sens	Connector 8 Male	J3	MOLEX_22-27-2081	Connector 8 Male	1
INhiside & Vsens	Connector 7 Male	J4	MOLEX_22-04-1071	Connector 7 Male	1
IN_5019	Connector 7 Male	J5	MOLEX_22-04-1071	Connector 7 Male	1
IN2sp30	Connector 7 Male	J6	MOLEX_22-04-1071	Connector 7 Male	1
Internal Supply	Connector 7 Male	J7	MOLEX_22-04-1071	Connector 7 Male	1
33uH	Inductor	L1	IND_WURTH_WE-PD_7332(METAL)	Inductor	1
	LED Blue 1C 2A	LD1, LD5	LED_5MM_YELLOW_1C-2A	LED Blue 1C 2A	2
	LED Green 1C 2A	LD2, LD6	LED_5MM_GREEN_1C-2A	LED Green 1C 2A	2
	LED Red 1C 2A	LD3, LD4	LED_5MM_RED_1C-2A	LED Red 1C 2A	2
10k	Resistor	R1, R12, R17, R20, R25, R26, R33, R43, R47	RESC1608X55N	Resistor	9
1k [DNP]	Resistor	R2, R11	RESC1608X55N	Resistor	2
1k	Resistor	R3, R7, R8, R9, R10, R13, R14, R15, R16, R18, R19, R21, R22, R27, R28, R41, R42, R45, R46	RESC1608X55N	Resistor	19
1k	Resistor	R4, R6	RESC2013X64N	Resistor	2
2k2	Resistor	R5, R23, R24, R29, R31, R32, R34, R35, R36	RESC1608X55N	Resistor	9
510	Resistor	R30	RESC1608X55N	Resistor	1
	Resistor	R37, R39	RESC1608X55N	Resistor	2
15.4k	Resistor	R38	RESC1608X55N	Resistor	1
10	Resistor	R40, R44	RESC2012X60N	Resistor	2
	N-CHANNEL MOSFET WITH DIODE	T1	TO228P991X239-3N-R546X521	N-MOSFET-D 1G 2D 3S	1
BC857B	PNP Transistor	T2, T5	SOT95P230X110-3N	BC857B	2
BC847BV	45V, 100mA NPN General Purpose Double Transistor	T3, T4, T7	SOT65P210X110-6N	BC847BV	3
Device	P-CHANNEL MOSFET WITH DIODE	T6, T8	TO228P991X239-3N-R546X521	P-MOSFET-D 1D 2G 3S	2
VNH5019A-E	Motor Driver Power MOSFET Parallel, PWM MultiPowerSO-30	U1	STMicroelectronics_MultiPowerSO-30_0	VNH5019A-E	1
VNH2SP30-E	IC MOTOR DRIVER PAR 30MULTIPWRSO	U2	STMicroelectronics_MultiPowerSO-30_0	VNH2SP30-E	1
TPS54331D	Buck Step Down Regulator with 3.5 to 28 V Input and 0.8 to 25 V Output, -40 to 150 degC, 8-Pin SOIC (D), Green (RoHS & no Sb/Br)	U3	SOIC127P600X175-8N	TPS54331D	1
IR4427STRPBF		U4	SOIC127P600X175-8N	IR4427STRPBF	1