

Comment	Description	Designator	Footprint	LibRef	Quantity	Supplier 1	Supplier Part Number 1
2pos-1H-2.54mm	2pos-1H-2.54mm Header	P6, P8, P9	HDR1X2	2pos-1H-2.54mm	3	Digi-Key	N/A
4pos-SMD-1.27mm	4pos SMD 1.27mm	P2	HDR1X4-SMD-50mils	4pos-SMD-1.27mm	1	Digi-Key	N/A
5pos-SMD-1.27mm	5pos-SMD-1.27mm	P10	HDR1X5-SMD-50mils-SLK	5pos-SMD-1.27mm	1	Digi-Key	N/A
3147-B1911NG--20D000214U1930CT-ND	LED GREEN DIFFUSED 0603 SMD	LED1, LED2	LED-0603-2PIN-SLKSCREEN	LED_GREEN	2	Digi-Key	3147-B1911NG--20D000214U1930CT-ND
3568-20	Fuse Holder 30 A 500V 1 Circuit Blade Through Hole	L3	FUSE_3568-20	3568-20	1	Digi-Key	36-3568-20-ND
2506036007Y3	60 Ohms @ 100 Mhz 1 Signal Line Ferrite Bead 0603 (1608 Metric) 3A 40mOhm	L1	CAPACTOR-0603	2506036007Y3	1	Digi-Key	1934-1396-1-ND
AP63205WU-7	Fixed 5V@2A, 32V Input, SOT-23-6	U3	SOT-23-6	AP63205WU-7	1	Digi-Key	AP63205WU-7DICT-ND
AS5600-ASOM	SENSOR ANGLE 360DEG SMD	U12	AS5600L-ASOM_AMS	AS5600-ASOM	1		
ASPI-4030S-4R7M-T	4.7 uH Shielded Drum Core, Wirewound Inductor 2 A 60mOhm Nonstandard	L2	INDUCTOR_ASPI-4030S-100M	ASPI-4030S-4R7M-T	1	Digi-Key	535-12322-1-ND
B6B-PH-K	JST, 1H, 6 position 0.079" (2.00mm)	J14	B6B-PH-K	B6B-PH-K	1	Digikey	455-B6B-PH-K-ND
CAP ALUM 680UF 20% 35V 1H 18mR	CAP ALUM 680UF 20% 35V 1H 18mR	C49, C61, C62, C63, C64	CAPACTOR- Aluminium-10.0x16mm-5mmPitch	Capacitor-680UF-35V-1H	5	Digi-Key	399-A750MM687M1VA AED18-ND
Capacitor-0402-10pF-50V-C0G	Capacitor-0402-10pF-50V-C0G	C7, C8	CAPACTOR-0402	Capacitor-0402-10pF-50V-C0G	2	Digi-Key	399-C0402C100KSGAC786CT-ND
Capacitor-0603-0.1uF-50V-X7R	Capacitor-0603-0.1uF-50V-X7R	C1, C2, C6, C8, C14, C15, C17, C34, C36, C37, C52, C65	CAPACTOR-0603	Capacitor-0603-0.1uF-50V-X7R	12	Digi-Key	1276-1935-2-ND
Capacitor-0603-0.22uF-50V-X7R	Capacitor-0603-0.22uF-50V-X7R	C29, C30, C31, C32, C38, C50	CAPACTOR-0603	Capacitor-0603-0.22uF-50V-X7R	6	Digi-Key	1276-6600-1-ND
Capacitor-0603-1uF-25V-XSR	Capacitor-0603-1uF-25V-XSR	C3, C5, C16, C24, C66	CAPACTOR-0603	Capacitor-0603-1uF-25V-XSR	5	Digi-Key	1276-1859-2-ND
Capacitor-0603-2.2uF-16V-XSR	2.2 uF ±10% 16V Ceramic Capacitor XSR0603 (1608 Metric)	C33, C35, C51	CAPACTOR-0603	Capacitor-0603-2.2uF-16V-XSR	3	Digikey	1276-1040-1-ND
Capacitor-0603-10uF-10V-XSR	10 uF ±20% 10V Ceramic Capacitor XSR0603 (1608 Metric)	C4, C10, C25, C26, C27, C28	CAPACTOR-0603	Capacitor-0603-10uF-10V-XSR	6	Digikey	4713-GMCT10XSR106M1 9N1CT-ND
Capacitor-0805-10uF-35V-XSR	Capacitor-0805-10uF-35V-XSR	C18, C19	CAPACTOR-0805	Capacitor-0805-10uF-35V-XSR	2	Digi-Key	490-10515-1-ND
Capacitor-0805-22uF-16V-XSR	Capacitor-0805-22uF-16V-XSR	C20, C21, C22, C23	CAPACTOR-0805	Capacitor-0805-22uF-16V-XSR	4	Digi-Key	1276-6780-1-ND
CX2016DB40000D0RL JCC	40 Mhz ±10ppm Crystal 8pF 50 Ohms 4-SMD, No Lead	X1	4-SMD	CX2016DB40000D0RL JCC	1	Digikey	478-CX2016DB40000D0RLCCT-ND
D3V3F4U10LP-7	5V (Typ) Clamp 5A (8/20us) 1pp Tie Diode Surface Mount U-DFN2510-10	D3	U-DFN2510-10	D3V3F4U10LP-7	1	Digi-Key	D3V3F4U10LP-7DICT-ND
ESDCAN24-2BLY	55V Clamp 6A (8/20us) 1pp Tie Diode Surface Mount SOT-23	D2	SOT-23-3	ESDCAN24-2BLY	1	Digi-Key	5272-ESDCAN24-2BLYCT-ND
ESP32-S3FN8-SOC	IC RF TxRx + MCU Bluetooth, WiFi 802.11b/g/n, Bluetooth v5.0 2.412GHz ~ 2.484GHz 56-VQFN Exposed Pad	U1	VQFN-56 Exposed Pad	ESP32-S3FN8-SOC	1	Digikey	1965-ESP32-S3FN8-ND
IFX007TAUMA1	Half Bridge Driver DC Motors, General Purpose Power MOSFET PG-T0263-7-1 55A 40V	U5, U6, U8	DPAK127P1500X440-8N	IFX007TAUMA1	3	Digi-Key	IFX007TAUMA1CT-ND
INA240A2QDRQ1	Current Sense Amplifier 1 Circuit 8-SOIC 50 V/V	U7, U9	SOIC-8	INA240	2	Digi-Key	296-49647-1-ND
LM359QT	General Purpose Amplifier 2 Circuit 8-DFN (2x2)	U10, U11	DFN8-2x2	LM359QT	2	Digikey	497-12007-1-ND
NCP176AMX30TCG	IC REG LINEAR 3.3V 500mA 6-XDFN	U4	XDFN-6 Exposed Pad	NCP176AMX30TCG	1	Digi-Key	NCP176AMX30TCGOSCT-ND
Net Tie_0402		T1, T2, T3, T4, T5	Net Tie-0402	Net Tie_0402	5		
NUP4301MR6T1G	4CH Clamp 1pp Tie Diode Surface Mount SOT23-6 (SC74)	D1	SOT-23-6	NUP4301MR6T1G	1	Digi-Key	NUP4301MR6T1GOSTR-ND
PTS815 SUM250 SMTR LFS	TACT 4.2 X 3.2, 2.5 MM H, 180GF	SW1, SW2	SW4 PTS815 SUM250 SMTR LFS CNK	PTS815 SUM250 SMTR LFS	2	Digi-Key	CKN12215-1-ND
Resistor-0603-5.1k	0603 footprint DO NOT INSTALL	R1, R2	RESISTOR-0603	Resistor-0603-DNII	2		
RJ45 UnShield	Jack Modular Connector 8p8c (RJ45, Ethernet) 90° Angle (Right) Unshielded Cat3	P5, P7	AMPHENOL_54602-908LF	RJ45	2	Digikey	609-1046-ND
SMT resistor	Resistor0603-0.0	R13, R15, R20	Resistor-0603	Resistor-0603-0.0	3	Digi-Key	311-0.0GRCCT-ND
SMT resistor	Resistor0603-1k	R5, R6	Resistor-0603	Resistor0603-1k	2	Digi-Key	RMCT60303FTK00TR-ND
SMT resistor	Resistor0603-1k	R12, R14, R19	Resistor-0603	Resistor-0603-1k	3	Digi-Key	311-1.00K4RCCT-ND
SMT resistor	Resistor0603-1.69k	R21, R26, R28	Resistor-0603	Resistor-0603-1.69k	3	Digi-Key	311-1.69K4RCCT-ND
SMT resistor	Resistor0603-3.3k	R22, R27, R29	Resistor-0603	Resistor-0603-3.3k	3	Digi-Key	311-3.30K4RCCT-ND
SMT resistor	Resistor0603-4.7k	R23, R24, R25	Resistor-0603	Resistor-0603-4.7k	3	Digi-Key	13-RC0603FR-134K7LCT-ND
SMT resistor	Resistor0603-10k	R3, R4	Resistor-0603	Resistor0603-10k	2	Digi-Key	311-10.0K4RTR-ND
SMT resistor	Resistor0603-10k	R7, R8, R10, R11, R16, R18	Resistor-0603	Resistor-0603-10k	6	Digi-Key	311-10.0K4RTR-ND
SMT resistor	Resistor-3920-1mR	R8, R17	RESISTOR-3920	Resistor-3920-1mR	2	Digi-Key	4506-PEWM03920D1L00K9CT-ND
SN65HVD23ZDR	1/1 Transceiver Half CANbus 8-SOIC	U2	SOIC-8	SN65HVD23ZDR	1	Digikey	296-26344-1-ND
USB-C Vertical	USBH145-03-0230-C 5A USB USB 2.0 Receptacle	P1	GCT USBH145-03-0230-C_REV/A2	USB-C Vertical	1	Digikey	2073-USBH145-03-0230-CCT-ND
XT30_PCB	XT30	P4	XT30PW_smd	XT30_pcb	1	Digi-Key	
XT60_PCB	XT60	P3	XT60PWM	XT60_pcb	1	Digi-Key	N/A277-1667-ND