

	Description	Designator	Footprint	LibRef	Quantity
Battery	Multicell Battery - 1220	BAT	Battery socket SMD	Battery	
Tact-5*3	Push Button Switch	BOOT, RESET, USER1, WK-UP	Tact-5*3	Switch PB	
10uF	CAPACITOR,	C1, C4, C11, C18, C41	C0603	CAP_EL, c, CAP1	
100nF	Capacitor - 603 CAPACITOR, Capacitor - 603, Bipolar Capacitor	C2, C3, C6, C7, C12, C13, C14, C15, C16, C17, C19, C22, C24, C25, C31, C32, C34, C35, C36, C38, C39, C42	C0603	CAP1, CAP, Cap- Bipolar, CAP_EL	2
15nF	Conneitor 402		00403	CAP	
15pF	Capacitor - 603	C5, C8	C0603	CAP	
22pF	Capacitor - 603 Capacitor - 603	C9, C10	C0603		
2.2UF 1uF	Bipolar Capacitor, CAPACITOR	C20, C21 C23, C40	C0603	CAP Cap-Bipolar, CAP1	
100nF	CAPACITOR, Bipolar	C26, C27, C28, C29,	0603C	CAP1, Cap-Bipolar	
2265	Capacitor	C37, C43, C45	04030	CAD1	
22pF 10uF	CAPACITOR	C30 C33	0603C 1206	CAP1 CAP_EL	
10uF,50V	CAPACITOR CAPACITOR	C44	1206	CAP_EL CAP1	
CON2			SIP2	CON2	
	CONNECTOR	CAN, RS485 D1	SOT-23		
BAT54C 1N5822	Schottky Diode	D2, D5, D9, D15	SMA	DIODE SCHOTTKY, D	
				Schottky	
5.6V	ZENER DIODE	D3, D12	MELF-D	ZENER1	
BAV99		D4	SOT-23	Component_1	
RED	LED RED 0603	D6	LED0603	LED-2L	
BLUE	LED BLUE 0603	D7, D8	LED0603	LED-2L	
9.1V	ZENER DIODE	D10	MELF-D	ZENER1	
IN5822	Schottky Diode	D11	SMA	D Schottky	
4148	DIODE	D16	MELF-D	DIODE	
2AMPER	Fuse	F1	0805R	RES 0805	
FPC50-TOP		FPC1	FPC50	Header50	
FPC6-0.5-TOP	CONNECTOR	GT-CT	FPC 6 Pin 0.5mm	CON6	
Header 25	Header, 25-Pin	J2, J3	HDR1X25	Header 25	
HDR1*3		JP1, JP2	SIP3	Jumper3	
FB		L1	L0603	INDUCTOR	
10uH		L2, L3	L0603	INDUCTOR	
10uH 100mA		L4	1812	INDUCTOR	
22uH 500mA		L5	L5X5	INDUCTOR	
microsd		MMC1	MMC-SMD	microsd	
MP1		MP1	Mark Point 4	TP	
MP2		MP2	Mark Point 4	TP	
MP3		MP3	Mark Point 4	TP	
MP4		MP4	Mark Point 4	TP	
\$8050	NPN Transistor	Q1, Q2	SOT-23	NPNSMD	
SI2301	P-Channel MOSFET	Q3	SOT-23	P-Channel MOSFET	
10K	Resistor-603, RESISTOR, Resistor	R1, R2, R3, R4, R5, R11, R14, R17, R18, R19, R20, R23, R25,	R0603	res1, Resistor, RES, RES-SMD, RES2, RES 0805	1
	SMD, [NoValue]	R26, R27, R28, R29, R34, R38			
	SMD, [NoValue] Resistor-603,	R34, R38 R6, R8, R10, R21, R22,	R0603	R, res1, RES, RES 0805	
1.5K 22R	SMD, [NoValue]	R34, R38	R0603 R0603	R, res1, RES, RES 0805 RES 0805, R	
1.5K 22R	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-	R34, R38 R6, R8, R10, R21, R22, R30, R31		RES 0805, R	
1.5K	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13	R0603	RES 0805, R	
1.5K 22R 120K 10K	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15	R0603	RES 0805, R	
11.5K 22R 120K 10K 2R,5%	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16	R0603 R0603 MU-POT	RES 0805, R RES POT1	
1.5K 22R 120K 110K 2R,5%	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor- 603 RESISTOR POT RESISTOR	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24	R0603 R0603 MU-POT 0805R	RES 0805, R RES POT1 RES	
1.5K 22R 120K 10K 2R,5% 1K	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor- 603 RESISTOR POT RESISTOR Resistor	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35	R0603 R0603 MU-POT 0805R R0603	RES 0805, R RES POT1 RES Resistor	
1.5K 22R 120K 10K 2R,5% 1K 120R	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue], [NoValue], Resistor-603 RESISTOR POT RESISTOR Resistor Resistor Resistor RESISTOR RESISTOR RESISTOR	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33	R0603 R0603 MU-POT 0805R R0603 R0603	RES 0805, R RES POT1 RES Resistor Resistor	
1.5K 22R 120K 10K 2R,5% IK 120R 120 10K/NC	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT RESISTOR Resistor Resistor Resistor Resistor Resistor	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R36	R0603 R0603 MU-POT 0805R R0603 R0603 0805R	RES 0805, R RES POT1 RES Resistor Resistor Resistor	
1.5K 22R 120K 10K 2R,5% 1K 120R 120 10t/NC	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue], [NoValue], Resistor-603 RESISTOR POT RESISTOR Resistor Resistor Resistor RESISTOR RESISTOR RESISTOR	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R35 R37	R0603 R0603 MU-POT 0805R R0603 R0603 0805R R0603	RES 0805, R RES POT1 RES Resistor Resistor Resistor Resistor Resistor	
11.5K 22R 1120K 110K 2R.5% 1K 120R 120 110K/NC 110K/NC 110K USB-MICRO	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT RESISTOR	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R36 R37 R37 R-41	R0603 R0603 MU-POT 0805R R0603 R0603 0805R R0603 S0P8	RES 0805, R RES POT1 RES Resistor Resistor Resistor Resistor RES RES RES RES RESPACK4_2	
11.5K 22R 120K 10K 2R,5% 1K 120P 1120P 110K/NC 10K/NC 10K/NC 00K USB-MICRO CONS	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT RESISTOR Resistor Resistor Resistor Resistor RESISTOR ARRAY Mini USB Connector Header, S-Pin	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R36 R37 R-A1 SERIAL, USB	R0603 R0603 MIL-POT 0805R R0603 R0603 0805R R0603 S056R R0603 S058R R0603 SUBJECT SUBJ	RES 0805, R RES POT1 RES Resistor Resistor Resistor Resistor RESPACK4_2 USB mini CON5	
22R 22R 120K 110K 2R,5% 1K 1120R 1200 10K/NC 10K/NC 10K/NC 00K USB-MICRO CONS	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue], [NoValue], Resistor-603 RESISTOR POT RESISTOR Resist	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R36 R37 R-A1 SERIAL, USB SWD IFT-40P	R0603 R0603 MJL-POT 0805R R0603 R0603 0805R R0603 0805R R0503 SOPB USB-MICRO SIP5 FPC40	RES 0805, R RES POT1 RES Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CON5 Header40	
11.5K 22R 120K 10K 2R.5% 1K 120R 120 10K/NC 10K USB-MICRO CONS FPC40-TOP CON4	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT RESISTOR Resistor Resistor Resistor Resistor RESISTOR ARRAY Mini USB Connector Header, S-Pin	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R36 R37 R-A1 SERIAL, USB SWD	R0603 R0603 MIL-POT 0805R R0603 R0603 0805R R0603 S056R R0603 S058R R0603 SUBJECT SUBJ	RES 0805, R RES POT1 RES Resistor Resistor Resistor Resistor RESPACK4_2 USB mini CON5	
1.5K 22R 120K 100K 2R,5% 1K 120R 120 10K/NC 10K/NC 10K/NC CON5 FPC40-TOP CON4 STM32H7B0VBT6	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue], [NoValue], Resistor-603 RESISTOR POT RESISTOR Resist	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R37 R-A1 SERIAL, USB SWD IFT-40P TouchPad U1	R0603 R0603 MU-POT 0805R R0603 R0603 R0603 S0P8 USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4	RES 0805, R RES POT1 RES Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CON5 Header40 CON4 AMS1117	
1.5K 22R 120K 110K 2R,5% 1K 120 10K/NC 10K 120 10K/NC 10K 10K 2R,5% 120 10K/NC 10K 120 10K 10K 120 10K 130 130 130 130 130 130 130 130 130 130	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT RESISTOR ARRAY mini USB Connector Header, 5-Pin 2.54mm CONNECTOR	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R36 R37 R-A1 SERIAL, USB SWD TFT-40P TouchPad U1 U2 U3	R0603 R0603 MIL-POT 0805R R0603 R0603 R0603 R0603 SOPB USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TOFP100	RES 0805, R RES POT1 RES Resistor Resistor Resistor Resistor Resistor RES RESPACK4_2 UCON5 Header40 CON4 STM32H7B0	
1.5K 22R 120K 10K 2R.5% 11K 120C 10K 120 10K/NC 10K 10SE-MICRO CON5 FPE(40-TOP) CON4 STIM32H7B0VBT6 AMS1117-3.3 PRTR5V0U2X	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT RESISTOR Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor ARESITOR RESISTOR RESISTOR RESISTOR RESISTOR RESISTOR RESISTOR RESISTOR RESISTOR AREAY mini USB Connector Header, 5-Pin 2-54mm 1A LOW DROPOUT VOLTAGE REGULATOR	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R36 R37 R-A1 SERIAL, USB SWD IFT-40P TouchPad U1 U2	R0603 R0603 MU-POT 0805R R0603 R0603 0805R R0603 0805R R0603 SOP8 USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TGPP100 SOT-223	RES 0805, R RES POT1 RES Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CON5 Header40 CON4 AMS1117	
1.5K 22R 120K 10K 2R.5% IK 120 100K/NC 10K 120 100K/NC 10K 10SB-MICRO CON15 FPC40-TOP CON4 STM32H7B0VBT6 AMS1117-3.3 PRTRSV0U2X EP2104	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT RESISTOR ARRAY mini USB Connector Header, 5-Pin 2.54mm CONNECTOR	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R36 R37 R-A1 SERIAL, USB SWD TFT-40P TouchPad U1 U2 U3	R0603 R0603 MU-POT 0805R R0603 R0603 R0603 R0603 SOPB USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TQFP100 SOT-223 SOT143B	RES 0805, R RES POT1 RES RESISTOR Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CON5 Header40 CON4 STM32H7B0 AMS1117 PRTRSV0U2X	
1.5K 22R 120K 10K 2R.5% IK 120 10IOK/NC 10K 120 10IOK/NC 10K 10S 10S 10S 10S 10S 10S 10S	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue], [NoValue], Resistor-603 RESISTOR POT RESISTOR RESIST	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R33 R37 R-A1 SERIAL, USB SWD TFT-40P TouchPad U1 U2 U3 U4 U5	R0603 R0603 MU-POT 0805R R0603 R0603 R0603 R0603 S0P8 USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TGFP100 SOT-223 SOT1438 GFN-24 SO-8	RES 0805, R RES POT1 RES POT1 RES Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CONS Header40 CON4 STM32H7B0 AMS1117 PRTRSV0U2X Component_1 ST485	
1.5K 22R 2120K 110K 2R,5% 11K 120R 1120 110K/NC 10K/NC 10K/NC 10K USB-MICRO CON5 FPC40-TOP CON4 STIM32H/7B0VBT6 AM/S1117-3.3 PRTRSVOUZX CP2104 SP3485	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT RESISTOR ARRAY mini USB Connector Header, 5-Pin 2.5-4mm CONNECTOR 1A LOW DROPOUT VOLTAGE REGULATOR R5485 TRANCCIVER	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R33 R36 R37 R-A1 SERIAL, USB SWD TFT-40P TouchPad U1 U2 U3 U4 U5	R0603 R0603 MU-POT 0805R R0603 R0603 R0603 R0603 S0P8 USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TGFP100 SOT-223 SOT143B GFN-24 SO-8 TSOT23-6	RES 0805, R RES POT1 RES POT1 RES Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CON5 Header40 CON4 STM32H7B0 AMS1117 PRTRSV0U2X Component_1 ST485 MP3202	
1.5K 22R 120K 10K 2R,5% 11K 120R 120 10K/NC 10K USB-MICRO CON5 FPC40-TOP CON4 STM32H780VBT6 AMS1117-3.3 PRTR5V0U2X CP2104 SP3485 MP3202 W25064JV	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue], [NoValue], Resistor-603 RESISTOR POT RESISTOR RESIST	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R36 R37 R-A1 SERIAL, USB SWD TFT-40P TouchPad U1 U2 U3 U4 U5 U6 U7, U8	R0603 R0603 MIL-POT 0805R R0603 R0603 R0603 R0603 SOPB USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TOFP100 SOT-223 SOT143B OFN-24 SO-8 TSOT23-6 SO-8-W	RES 0805, R RES POT1 RES Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CON5 Header40 CON4 STM32H7B0 AMS1117 PRTRSV0U2X Component_1 ST485 MP3202 Component_1	
1.5K 22R 1.20K 10K 2R.5% IK 120R 10Z 120R 120 10K/NC 10K 10S-MICRO CONS FPC40-TOP CON4 STIM32H7B0VBT6 AMS1117-3.3 PRTRESV0U2X CP2104 FP32485 MP3202 WP32064IV KPT2046	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue], [NoValue], Resistor-603 RESISTOR POT RESISTOR RESIST	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R36 R37 R-A1 SERIAL, USB SWD TFT-40P TouchPad U1 U2 U3 U4 U5 U6 U7, U8 U9	R0603 R0603 MU-POT 0805R R0603 R0603 R0603 R0603 SOP8 USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TQFP100 SOT-223 SOT143B QFN-24 SO-8 TSOT23-6 SO-8-W SSOP-16	RES 0805, R RES POT1 RES POT1 RES Resistor Resi	
1.5K 22R 120K 120K 120K 121C 18	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue], [NoValue], Resistor-603 RESISTOR POT RESISTOR RESIST	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R37 R-A1 SERIAL, USB SWD IFT-40P TouchPad U1 U2 U3 U4 U5 U6 U7, U8 U9 U10	R0603 R0603 R0603 MILPOT 0805R R0603 R0603 R0603 R0603 SOP8 USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TGFP100 SOT-223 SOT1438 GFN-24 SO-8 TSOT23-6 SO-8-W SSOP-16 SO-8 SO-8	RES 0805, R RES POT1 RES POT1 RES Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CON5 Header40 CON4 STM32H7B0 AMS1117 PRTRSV0L2X Component_1 ST485 MP3202 Component_1 Component_1 Component_1 Component_1	
1.5K 22R 120K 10K 2R.5% IK 120R 120 10K/NC 10K USB-MICRO CON5 FPC40-TOP CON4 STIM32H7B0VBT6 AMS1117-3.3 PRTR5V0UZX CP2104 SP3485 MP3202 WZ5664IV WZF12046 SN65HDV230 TPS61040DBV	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue] [NoValue], Resistor-603 RESISTOR POT RESISTOR RESISTO	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R33 R37 R-A1 SERIAL, USB SWD TFT-40P TouchPad U1 U2 U3 U4 U5 U6 U7, U8 U9 U10 U11	R0603 R0603 MU-POT 0805R R0603 R0603 R0603 R0603 R0603 SOPB USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TG/PP100 SOT-223 SOT143B GFN-24 SO-8 TSOT23-6 SO-8 SO-8-W SSOP-16 SO-8-S	RES 0805, R RES POT1 RES RESISTOR Resistor Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CON5 CON4 STM32H7B0 AMS1117 PRTRSVOUZX Component_1 ST485 MP3202 Component_1 Compo	
1.5K 22R 120K 10K 2R,5% 1K 120R	SMD, [NoValue] Resistor-603, RESISTOR, [NoValue], [NoValue], Resistor-603 RESISTOR POT RESISTOR RESIST	R34, R38 R6, R8, R10, R21, R22, R30, R31 R7, R9, R12, R13 R15 R16 R24 R32, R35 R33 R37 R-A1 SERIAL, USB SWD IFT-40P TouchPad U1 U2 U3 U4 U5 U6 U7, U8 U9 U10	R0603 R0603 R0603 MILPOT 0805R R0603 R0603 R0603 R0603 SOP8 USB-MICRO SIP5 FPC40 FFC/SM1.0-2H4 TGFP100 SOT-223 SOT1438 GFN-24 SO-8 TSOT23-6 SO-8-W SSOP-16 SO-8 SO-8	RES 0805, R RES POT1 RES POT1 RES Resistor Resistor Resistor Resistor RES RESPACK4_2 USB mini CON5 Header40 CON4 STM32H7B0 AMS1117 PRTRSV0L2X Component_1 ST485 MP3202 Component_1 Component_1 Component_1 Component_1	