



Designator	Comment	Description	Quantity
B1	OMRON B3U- 1000PM	OMRON B3U-	1
RI	Short if LC05111	1000PM	-
	protection not		
В3	used/present at battery pack	Solder bridge	1
BUT1	SKRHABE010	5-way joystick	1
C1, C2	20p	0603	2
C3, C5, C8, C9,	Lop	0000	-
C10, C11, C13,			
C21, C22, C23, C24, C25, C26,			
C27, C28, C30,			
C31, C32, C33,			
C34, C35, C36, C37, C38, C39,			
C40, C41, C42,			
C43, C44, C45,			
C46, C47, C48, C51, C52, C53,			
C54, C55, C56	1u	0603	40
C4, C6, C7, C12,			
C14, C15, C16, C17, C18, C19	1u 50V	0603	10
C20, C29	15p	0603	2
C49, C50	10n	0603	2
C47, C30	bigass ceramic or	0003	
C57	tantalum, 5V min	1206	1
CONI	5x2 1.27mm	programming	
CON1	header, SMD	connector for uC OMRON	1
CON2	E-ink PFC	XF2W24151AR100	1
	2pin picoblade		
CON_BAT	connector		1
CON_BUZ	1x2 Header, 1.25mm		1
CON_HEAT,		90deg angle,	
CON_SOL	1x2 Header, 1.25	[NoValue]	2
D1, D2, D3, D9	MBR0530	SOD-123 shottky diode	4
D4, D7	2V7 zener	micromelf	2
D4, D7	zv7 zerrer	SC70 3x zener	2
D6, D8	BAT54TW	diode	2
	FASTRON 1210F-	40405 (000 04	
L1	680K-01 600R 0805 ferrite	1210F-680K-01	1
L2, L3	bead	0805	2
M_BT	RN4871	bluetooth module	1
M_GPS	CAM-M8	u-blox CAM GNSS antenna module	1
Q1, Q4	NDS355	N-FET transistor	2
	DMP2305	P-FET transistor	2
Q2, Q3 R1, R2, R4, R5, R9,	DIVIF2303	F-FET (TAITSISTO)	
R12, R15	2k2	0805	7
R3	1Meg	0805	1
R6, R8	12k	0805	2
R7	3R	0805	1
R10	12k 1%	0805	1
R11	680R	0805	1
R13	0R039	0805	1
R14	1k	0805	1
R18	10R	0805	1
N 10	microSD slot	0000	
	ATTEND 112I-TDAR-	ATTEND 112I-TDAR-	
SD1	R	R	1
U1	SAM D21G	Atmel ARM M0+ uC	1
· ·	OF SIVE DE TO	40	
112	HSB 2244	SD card reader	
U2	USB2244	SD card reader	1
U2 U3	USB2244 USBLC6-4	ESD protection	1
U3	USBLC6-4	ESD protection SOT23-5 single	1
U3 U4 U5	USBLC6-4 NC7S14 23K256 25AA040A	ESD protection SOT23-5 single Inverter SPI SRAM	1 1
U3 U4	USBLC6-4 NC7S14 23K256	ESD protection SOT23-5 single Inverter	1
U3 U4 U5	USBLC6-4 NC7S14 23K256 25AA040A	ESD protection SOT23-5 single Inverter SPI SRAM	1 1
U3 U4 U5 U6 U7, U10, U15, U17	USBLC6-4 NC7S14 23K256 25AA040A EEPROM NX3008CBKS	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom	1 1 1 1 1
U3 U4 U5 U6 U7, U10, U15, U17	USBLC6-4 NC7S14 23K256 25AA040A EEPROM NX3008CBKS BMX160	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos IMU mems unit SOT23 3.3V LDO	1 1 1 1 4
U3 U4 U5 U6 U7, U10, U15, U17	USBLC6-4 NC7S14 23K256 25AA040A EEPROM NX3008CBKS	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos IMU mems unit SOT23 3.3V LDO regulator	1 1 1 1 1
U3 U4 U5 U6 U7, U10, U15, U17	USBLC6-4 NC7S14 23K256 25AA040A EEPROM NX3008CBKS BMX160	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos IMU mems unit SOT23 3.3V LDO regulator SOT23 linear	1 1 1 1 4
U3 U4 U5 U6 U7, U10, U15, U17 U8 U9, U11	USBLC6-4 NC7S14 23K256 25AA040A EEPROM NX3008CBKS BMX160 NCP718 3V3	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos IMU mems unit SOT23 3.3V LDO regulator SOT23 linear battery charging	1 1 1 1 4
U3 U4 U5 U6 U7, U10, U15, U17 U8 U9, U11	USBLC6-4 NC7514 23K256 25AA040A EEPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos MU mems unit SOT23 3.3V LDO regulator SOT23 linear battery charging controller Battery protection	1 1 1 1 1 4 1 2
U3 U4 U5 U6 U7, U10, U15, U17 U8 U9, U11	USBLC6-4 NC7S14 23K256 25AA040A EEPROM NX3008CBKS BMX160 NCP718 3V3	ESD protection SO723-5 single Inwerter SPI SRAM  SPI eeprom  SC70 N/P dual mos IMU mems unit SO723 3.3V LDO regulator SO123 linear battery charging controller	1 1 1 1 1 4 1 2
U3 U4 U5 U6 U7, U10, U15, U17 U8 U9, U11	USBLC6-4 NC7514 23K256 25AA040A EEPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos IMU mems unit SOT23 33 VLDO regulator SOT23 13 vLDO regulator SOT23 Battery charging controller Battery protection circuit	1 1 1 1 1 4 1 2
U3 U4 U5 U6 U7, U10, U15, U17 U8 U9, U11	USBLC6-4 NC7514 23K256 25AA040A EEPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos MU mems unit SOT23 3.3V LDO regulator SOT23 linear battery charging controller Battery protection	1 1 1 1 1 4 1 2
U3 U4 U5 U6 U7, U10, U15, U17 U8 U9, U11 U12	USBLC6-4 NC7514 23K256 25AA010A EPPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831 LC05111	ESD protection SOT23-5 single Inverter SPI SRAM  SPI eeprom  SC70 N/P dual mos IMU mems unit SOT23 33 V LDO regulator SOT23 linear battery charging controller Battery protection circuit Battery monitoring gauge	1 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1
U3 U4 U5 U6 U7, U10, U15, U17 U8 U9, U11 U12 U13 U14	USBLC6-4 NC7514 23K256 25AA010A EPPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831 LC05111 MAX17055 MCP6001	ESD protection SOT23-5 single Inverter SPI SRAM  SPI eeprom  SC70 N/P dual mos IMU mems unit SOT23 3.3V LDO regulator SOT23 linear battery charging controller Battery protection circuit  Battery monitoring gauge SOT23 R-R opamp temp and	1 1 1 1 1 4 4 1 1 1 1 1
U3  U4  U5  U6  U7, U10, U15, U17  U8  U9, U11  U12  U13  U14  U16  U18	USBLC6-4 NC7514 23K256 22SAA040A EEPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831 LC05111 MAX17055 MCP6001 sl7021	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos MMU mems unit SOT23 3/3 U.DO regulator SOT23 3/3 U.DO regulator SOT23 1/3 U.DO regulator SOT23 1/3 U.DO regulator SOT23 Inear battery charging controller Battery monitoring gauge SOT23 R-R opamp temp and humdifly sensor	1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
U3  U4  U5  U6  U7, U10, U15, U17  U8  U9, U11  U12  U13  U14  U16  U18  U19	USBLC6-4 NC7514 23K256 25AA010A EPPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831 LC05111 MAX17055 MCP6001	ESD protection SOT23-5 single Inverter SPI SRAM  SPI eeprom  SC70 N/P dual mos IMU mems unit SOT23 3.3V LDO regulator SOT23 linear battery charging controller Battery protection circuit  Battery monitoring gauge SOT23 R-R opamp temp and	1 1 1 1 1 4 4 1 1 1 1 1
U3  U4  U5  U6  U7, U10, U15, U17  U8  U9, U11  U12  U13  U14  U16  U19  U19  U19  U19  U19  U19  U19	USBLC6-4 NC7514 23K256 25AA040A EPPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831 LC05111 MAX17055 MCP6001 si7021 LPS33	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos MMU mems unit SOT23 3/3 U.DO regulator SOT23 3/3 U.DO regulator SOT23 1/3 U.DO regulator SOT23 1/3 U.DO regulator SOT23 Inear battery charging controller Battery monitoring gauge SOT23 R-R opamp temp and humdifly sensor	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
U3  U4  U5  U6  U7, U10, U15, U17  U8  U9, U11  U12  U13  U14  U16  U18  U19	USBLC6-4 NC7514 23K256 25AA040A EEPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831 LC05111 MAX17055 MCP6001 si7021 LP533 SMD micro USB	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos MMU mems unit SOT23 3/3 U.DO regulator SOT23 3/3 U.DO regulator SOT23 1/3 U.DO regulator SOT23 1/3 U.DO regulator SOT23 Inear battery charging controller Battery monitoring gauge SOT23 R-R opamp temp and humdifly sensor	1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
U3  U4  U5  U6  U7, U10, U15, U17  U8  U9, U11  U12  U13  U14  U16  U19  U19  U19  U19  U19  U19  U19	USBLC6-4 NC7514 23K256 25AA040A EPPROM NX3008CBKS BMX160 NCP718 3V3 MCP73831 LC05111 MAX17055 MCP6001 si7021 LPS33	ESD protection SOT23-5 single Inverter SPI SRAM SPI eeprom SC70 N/P dual mos MMU mems unit SOT23 3/3 U.DO regulator SOT23 3/3 U.DO regulator SOT23 1/3 U.DO regulator SOT23 1/3 U.DO regulator SOT23 Inear battery charging controller Battery monitoring gauge SOT23 R-R opamp temp and humdifly sensor	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1