



























	Designator	Footprint	Quantity	Value
	BT1 C1, C2, C5, C6,		1	
	C7, C8, C9, C10,			
	C11, C12, C16,			
	C19, C22, C23, C25, C26, C28,			
	C29, C30, C31,			
	C32, C33, C34,			
	C35, C36, C37,			
	C38, C39, C40, C41, C42, C43,			
C	C44, C45, C46,			
Capacitor, X7R, ±10%, 16V, 0402	C47, C48	CAPC1005N	37	100nF
	C3, C4	CAPC1005N	2	12pF
	C13, C14, C15,			
	C17, C18, C20, C21, C24, C51,			
	C52, C55, C63,			
Capacitor, XSR, ±10%, 10V, 0402	C67, C68	CAPC1005N	14	1uF
	C27, C50, C54,			
TAIYO YUDEN - EMK107BBJ106MA-T - CAP CER 10UF 16V 20% XSR 0603	C60, C62	CAPC1608N	5	10uF
WEATHER THOMPS STRONG AT CARTANTS SOURCE ACCUSION SOUT	C49, C53, C59,	TC7343-2917	4	220 5
	C61		- 4	220uF
Capacitor, X7R, ±10%, 16V, 0402	C56, C64	CAPC1005N	2	10nF
Capacitor, NP0, ±5%, 25V, 0402	C57, C65	CAPC1005N	2	47pF
Capacitor, X7R, ±10%, 16V, 0402	C58, C66	CAPC1005N	2	2.2nF
	D1, D3, D5, D7,			
	D9, D11, D13,			
	D15, D17, D19, D21 D23 D25	OVSRRGBCC3 SI		
	D27, D29, D31	DE	16	
	D2, D4, D6, D8,	DL.	10	
	D10, D12, D14,			1
	D16, D18, D20,			1
	D22, D24, D26,	DLCC4		1
	D28, D30, D32	PLCC4	16	
ROHM - SMLE12BC7TT86Q - LED, 0603, LO-CUR. BLU	D33, D34, D37	LED_0603	3	
VISHAY - SS34-E3/57T - DIODE SCHOTTKY 40V 3A DO214AB	D35, D36	DO-214AB	2	
	D38	LED_0603	1	
	D39	LED 0603	1	
	L1, L2	SRP7028A	- 1	6.8uH
SHENZHEN EONE ELECTRONICS CO.,LTD - IM120424015 - EONE High 16x2	L1, LE	JNF / UZOA	2	o.ouH
(1602) Characters LCD	LCD1		1	Ì
	LS1, LS2, LS3,			
	LS4, LS5, LS6,			1
	LS7, LS8, LS9,			1
	LS10, LS11, LS12, LS13, LS14, LS15.			1
AMS - TSL252R-LF - IC LIGHT TO VOLTAGE SENSOR 3PIN	LS16, LS14, LS15,	AMS_S_3PIN	16	1
and the second s	P1, P2, P8, P9,		10	
	P10, P11, P12,			1
	P13	HDR1X2	8	
KEYSTONE ELECTRONICS - 54 - BATTERY CLIP 18MM 18650 CELL	P3, P4	54	2	
GLOBAL CONNECTOR TECHNOLOGY - USB3140-30-0170-1-C - CONNECTOR,		USB3140-30-		
	P5	0170-1-C	1	
SAMTEC - SSW-116-22-F-S-VS - Conn Socket Strip SKT 16 POS 2.54mm Solder ST SMD Tube	P7	Samtec-SSW-116- 22-F-S-VS		
			-	
SAMTEC - SSW-106-01-T-D - SOCKET, 2.54MM, 2X6WAY	P14, P15	SSW-106-01-X-D	2	
GLOBAL CONNECTOR TECHNOLOGY - FFC2B10-24-T - FFC/FPC CONNECTOR, RECEPTACLE. 24POS. 1ROW	P16	FFC2B10		
	O1. O2. O3. O4.	FFC2B10	- '	
	Q5, Q6, Q7, Q8,			
	Q9, Q10, Q11,			
	Q12, Q13, Q14,			
	Q15, Q16, Q17,			
	Q18, Q19, Q20, Q21, Q22, Q23,			
	Q24, Q25, Q26,			
	Q27, Q28, Q29,			
	Q30, Q31, Q32,			
	Q33, Q34, Q35, Q36, Q37, Q38,			
	Q39, Q40, Q41,			
	042 043 044			
	Q45, Q46, Q47,			
	Q48	SOT95P230-3N	48	
FAIRCHILD SEMICONDUCTOR - FDC6306P - MOSFET 2P-CH 20V 1.9A SSOT6	Q49	SOT-6	1	
		SOIC127P600-		
	Q50, Q51	8AN	2	
VISHAY SILICONIX - SI44278DY-T1-E3 - MOSFET P-CH 30V 9.7A 8-SOIC	R1, R2, R4, R5,			
		ı		1
	R7, R8, R10, R11,			1
	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20,			
	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25,			
	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29,			
	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34.			
	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29,			
Resistor, ±1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R40, R41, R43, R44, R46, R47	RESC1608N	32	91R
Resistor, a1%, 0.1W, 0693	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R40, R41, R43, R44, R46, R47	RESC1608N	32	91R
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R40, R41, R43, R44, R46, R47 R3, R6, R9, R12, R15, R18, R21,	RESC1608N	32	91R
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R40, R41, R43, R44, R46, R47 R3, R6, R9, R12, R15, R18, R21, R24 R27 R30	RESC1608N	32	91R
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R44, R46, R47 R3, R6, R9, R12, R24, R27, R30, R33, R36, R39, R33, R36, R39, R42, R45, R48	RESC1608N	32	91R 150R
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R40, R41, R43, R44, R46, R47 R3, R6, R9, R12, R15, R18, R21, R24, R27, R30, R33, R36, R39, R33, R36, R39, R34, R48, R48, R49, R50, R55,			
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R40, R41, R43, R44, R46, R47 R3, R6, R9, R12, R15, R18, R21, R24, R27, R30, R33, R36, R39, R42, R45, R48			
Resistor, a1%, 0.1W, 0603 Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R40, R41, R43, R40, R41, R43, R44, R46, R47 R3, R6, R9, R12, R15, R18, R21, R3, R6, R9, R12, R3, R3, R3, R3, R3, R3, R3, R3, R3, R3,			
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R40, R41, R43, R40, R41, R43, R44, R46, R47 R3, R6, R9, R12, R15, R18, R21, R3, R5, R9, R12, R15, R18, R21, R3, R3, R3, R3, R3, R3, R3, R3, R3, R3, R3, R3, R3, R42, R5, R48, R49, R50, R55, R50, R61, R62, R63, R64, R65, R66, R67,			
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R40, R41, R43, R40, R41, R43, R41, R43, R41, R41, R33, R6, R9, R12, R24, R27, R30, R42, R45, R48, R49, R50, R55, R56, R57, R58, R59, R60, R61, R56, R63, R64, R65, R66, R67, R58, R68, R69, R70,			
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R44, R46, R47 R31, R6, R9, R12, R15, R18, R21, R24, R27, R30, R42, R45, R48 R42, R45, R48 R49, R50, R55, R50, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R68, R69, R70, R68, R69, R70, R68, R69, R71, R68, R69, R70,	RESC1608N	16	150R
Resistor, 81%, 0.1W, 0603 Resistor, 81%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R40, R41, R43, R40, R41, R43, R41, R43, R41, R41, R33, R6, R9, R12, R24, R27, R30, R42, R45, R48, R49, R50, R55, R56, R57, R58, R59, R60, R61, R56, R63, R64, R65, R66, R67, R58, R68, R69, R70,			
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R44, R46, R47 R31, R6, R9, R12, R15, R18, R21, R31, R32, R34, R33, R36, R9, R12, R31, R34, R34, R34, R34, R34, R35, R37, R36, R37, R37, R37, R37, R31, R31, R32, R31,	RESC1608N	16	150R
Resistor, a1%, 0.1W, 0603 Resistor, a1%, 0.1W, 0603 Resistor, a1%, 0.1W, 0603 Resistor, a1%, 0.1W, 0603	87, 88, 810, 811, 814, 816, 813, 814, 816, 817, 819, 820, 822, 823, 825, 826, 828, 829, 826, 826, 826, 826, 826, 826, 826, 826	RESC1608N RESC1608N RESC1608N	16	150R 10k 470R
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603	87, 88, 810, 811, 814, 816, 813, 814, 816, 817, 819, 820, 822, 823, 825, 826, 826, 826, 826, 826, 826, 826, 826	RESC1608N RESC1608N RESC1608N RESC1608N	16	150R 10k 470R 500k
Reistor, ±1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R27, R21, R21, R22, R22, R22, R23, R23, R23, R23, R23	RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N	16	150R 10k 470R 500k 1M
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.0W, 0603 Resistor, ±1%, 0.0W, 0603	R7, R8, R10, R11, R13, R14, R16, R13, R14, R16, R17, R19, R20, R22, R22, R22, R22, R22, R22, R23, R22, R23, R24, R25, R27, R21, R21, R21, R21, R21, R21, R21, R21	RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N	16	150R 10k 470R 500k 1M 442k
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R17, R19, R20, R27, R21, R21, R22, R22, R22, R23, R23, R23, R23, R23	RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N	16	150R 10k 470R 500k 1M
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R13, R14, R16, R17, R19, R20, R22, R22, R22, R22, R22, R22, R23, R22, R23, R24, R25, R27, R21, R21, R21, R21, R21, R21, R21, R21	RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N	16	150R 10k 470R 500k 1M 442k
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R13, R14, R16, R13, R14, R16, R11, R19, R20, R117, R19, R20, R17, R19, R20, R17, R19, R20, R17, R19, R20, R11, R21, R21, R21, R21, R21, R21, R21	RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N RESC1608N	22 5 1 1 1	150R 10k 470R 500k 1M 442k 150k 51k
Resistor, a1%, 0.1W, 0603 Resistor, a1%, 0.0W, 0603	R7, R8, R10, R11, R11, R13, R14, R16, R13, R14, R16, R11, R14, R16, R17, R18, R18, R18, R18, R18, R18, R18, R18	RESC1608N	22 5 1 1 1	150R 10k 470R 500k 1M 442k 150k 51k 698k
Resistor, £1%, 0.1W, 0603	R7, R8, R10, R11, R11, R12, R12, R13, R14, R16, R11, R14, R16, R16, R11, R14, R16, R16, R17, R17, R17, R17, R17, R17, R17, R17	RESC1600N	22 5 1 1 1	150R 10k 470R 500k 1M 442k 150k 51k 698k 82k
Resistor, £1%, 0.1W, 0603	R7, R8, R10, R11, R11, R13, R14, R16, R13, R14, R16, R11, R14, R16, R17, R18, R18, R18, R18, R18, R18, R18, R18	RESC1608N	22 5 1 1 1	150R 10k 470R 500k 1M 442k 150k 51k 698k
Resistor, ±1%, 0.1W, 0603	R7, R8, R10, R11, R11, R12, R12, R13, R14, R16, R11, R14, R16, R16, R11, R14, R16, R16, R17, R17, R17, R17, R17, R17, R17, R17	RESC1600N	22 5 1 1 1	150R 10k 470R 500k 1M 442k 150k 51k 698k 82k
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R11, R14, R16, R11, R14, R16, R11, R14, R16, R16, R11, R14, R16, R16, R12, R22, R25, R25, R26, R28, R29, R31, R22, R24, R34, R34, R34, R34, R34, R34, R34, R3	RESC1600N	22 5 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, £1%, 0.1W, 0603	R7, R8, R10, R11, R11, R13, R14, R16, R11, R14, R16, R11, R14, R16, R11, R14, R14, R14, R14, R14, R14, R14	RESCIGORN	22 5 1 1 1	150R 10k 470R 500k 1M 442k 150k 51k 698k 82k 2k
Resistor, £1%, 0.1W, 0603	87, 88, 810, 811, 814 181, 814, 816 822, 823, 825, 825, 825, 825, 825, 825, 825, 825	RESC160BN	22 5 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R11, R14, R16, R11, R14, R16, R11, R14, R16, R16, R11, R14, R16, R16, R12, R22, R25, R25, R26, R28, R29, R31, R22, R24, R34, R34, R34, R34, R34, R34, R34, R3	RESC160BN CESERC160BN CESERC16CN	222 5 5 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, £1%, 0.1W, 0603	87, 88, 810, 811, 814 181, 814, 816 822, 823, 825, 825, 825, 825, 825, 825, 825, 825	RESC160BN	22 5 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, a1%, 0.1W, 0603 Resistor, a1%, 0.1W,	87, 88, 810, 811, 814 181, 814, 816 182, 828, 828, 828, 828, 828, 828, 828,	RESC160BN CESERC160BN CESERC16CN	222 5 5 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, ±1%, 0.1W, 0693 Resistor, ±1%, 0.1W,	R7, R8, R10, R11, R12, R13, R14, R16, R15, R14, R16, R16, R14, R16, R16, R16, R16, R16, R16, R16, R16	RESC160BN CSE160BN CS	22 5 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R11, R13, R14, R16, R11, R14, R16, R11, R14, R16, R11, R14, R16, R11, R14, R16, R16, R17, R17, R16, R17, R16, R17, R17, R16, R17, R16, R17	RESC160BN CL-SB-12B-01T CP-AX100_L MSOP-10 SOT23-3N	222 5 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, a1%, 0.1W, 0603	R7, R8, R10, R11, R12, R13, R14, R16, R15, R14, R16, R16, R14, R16, R16, R16, R16, R16, R16, R16, R16	RESC160BN CL-SB-128-01T CP-AX100_L MOD-10 SOT23-31N	22 5 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, a1%, 0.1W, 0603 Resistor, a1%, 0.1W,	R7, R8, R10, R11, R11, R13, R14, R16, R13, R14, R16, R11, R14, R14, R14, R14, R14, R14, R14	RESC1600N RESC160N RE	222 5 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, a.1%, 0.1W, 0603 Re	87, 88, 810, 811, 814 181, 814, 816 182, 828, 828, 828, 828, 828, 828, 828,	RESC160BN	222 5 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W,	R7, R8, R10, R11, R11, R13, R14, R16, R11, R14, R16, R11, R14, R14, R14, R14, R14, R14, R14	RESC1600N RESC160N RE	222 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R
Resistor, ±1%, 0.1W, 0603 Resistor, ±1%, 0.1W,	87, 88, 810, 811, 814 181, 814, 816 182, 828, 828, 828, 828, 828, 828, 828,	RESC160BN	222 5 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 500k 1M 442k 150k 51lk 698k 82k 2k 330R