



























	Decignator	Footprint	Quantity	Value
Description 18650 1-Cell Lithium Ion Battery	Designator BT1		Quantity 1	· inc
	C1, C2, C5, C6, 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,			
Canadian V7D +109 16V 0407	C44, C45, C46, C47, C48	CAPC1005N	37	100nF
Eapacitor, X7R, ±10%, 16V, 0402 Eapacitor, NPO, ±2%, 25V, 0402	C47, C48 C3, C4	CAPC1005N CAPC1005N	2	12pF
Superior, (4 0, 12%, 234, 0402	C13, C14, C15,	CPG C1005IV		aap.
	C17, C18, C20, C21, C24, C52.			
	C53, C58, C62,			
Eapacitor, XSR, ±10%, 10V, 0402 FAIYO YUDEN - EMK107BBJ106MA-T - CAP CER 10UF 16V 20% XSR 0603	C63	CAPC1005N CAPC1608N	13	1uF 10uF
ANO YUDEN - EMK10/BBJ106MA-1 - CAP CER 10UF 16V 20% XSR 0603	C27, C55, C57	CAPC1608N	3	10uF
AIYO YUDEN - LMK212BJ226MG-T - CAPACITOR CERAMIC 22UF, 10V, XSR, 0805	C49, C50	CAPC2012N	2	22uF
AIYO YUDEN - LMK212 BJ106MG-T - CAP, MLCC, XSR, 10UF, 10V, 0805	C51	CAPC2012N	1	10uF
EMET - T491D227K016AT - CAP TANT 220UF 16V 10% 2917	C54, C56	TC7343-2917	2	220uF
Sapacitor, X7R, ±10%, 16V, 0402	C59	CAPC1005N	1	10nF
apacitor, NP0, ±5%, 25V, 0402	C60	CAPC1005N	1	47pF
apacitor, X7R, ±10%, 16V, 0402	C61 D1, D3, D5, D7,	CAPC1005N	1	2.2nF
	D9, D11, D13,			
	D15, D17, D19, D21, D23, D25.	OVSRRGBCC3_SI		
DPTEK - OVSRRGBCC3 - LED RED/GRN/BLUE 1204 SMD	D27, D29, D31	DE DE	16	
	D2, D4, D6, D8, D10, D12, D14,			
	D16, D18, D20,			
REE - CLV1A-FKB-CK1N1G1BB7R4S3 - LED RGB 3-IN-1 3.2X2.8MM 4PLCC	D22, D24, D26, D28, D30, D32	PLCC4	16	
OHM - SMLE12BC7TT86Q - LED, 0603, LO-CUR. BLU	D33, D34, D36	LED_0603	3	
TSHAY - SS34-E3/57T - DIODE SCHOTTKY 40V 3A DO214AB	D35, D34, D30	DO-214AB	1	
INGBRIGHT - KP-1608MGC - LED, 0603, GREEN, 70MCD, 568NM	D37	LED_0603	1	
INGBRIGHT - KP-1608SYC - LED, SMD, 0603, YELLOW	D38	LED_0603	1	
	L1	COILCRAFT_LPS4		2 2
OILCRAFT - LPS4018-222MRB - INDUCTOR, SHLD, 2.2UH, 20%, 1.5A, SMD OURNS - SRP7028A-6R8M - FIXED IND 6.8UH 4.5A 60 MOHM SMD	L1 L2	018 SRP7028A	1	2.2uH 6.8uH
HENZHEN EONE ELECTRONICS CO., LTD - IM120424015 - EONE High 16x2		JNF/UZBA	1	o.ourl
1602) Characters LCD	LCD1		1	
	LS1, LS2, LS3, LS4, LS5, LS6,			
	LS7, LS8, LS9,			
	LS10, LS11, LS12, LS13, LS14, LS15.			
AMS - TSL252R-LF - IC LIGHT TO VOLTAGE SENSOR 3PIN	LS16	AMS_S_3PIN	16	
MOLEX INC - 0022272021 - CONN HEADER 2POS .100 VERTTIN	P1, P2	HDR1X2	2	
EYSTONE ELECTRONICS - 54 - BATTERY CLIP 18MM 18650 CELL	P3, P4	54 USB3140-30-	2	
GLOBAL CONNECTOR TECHNOLOGY - USB3140-30-0170-1-C - CONNECTOR,		0583140-30- 0170-1-		
ISB 2.0 MICRO B, RCPT, SPOS, SMT	P5	C_MODIFIED	1	
AMTEC - SSW-116-22-F-S-VS - Conn Socket Strip SKT 16 POS 2.54mm Solder S MD Tube	P7	Samtec-SSW-116- 22-F-S-VS	1	
MOLEX INC - 22-27-2081 - HEADER, SQUARE PIN, 0.1", 8WAY	P8	HDR1X8	1	
AMTEC - SSW-106-01-T-D - SOCKET, 2.54MM, 2X6WAY	P9, P10	SSW-106-01-X-D	2	
GLOBAL CONNECTOR TECHNOLOGY - FFC2B10-24-T - FFC/FPC CONNECTOR,				
RECEPTACLE, 24POS, 1ROW	P11	FFC2B10	1	
	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11,			
	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, Q42, Q43, Q44, Q45, Q46, Q47,			
	Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29, Q30, Q31, Q32, Q33, Q34, Q35, Q36, Q37, Q38, Q39, Q40, Q41, Q42, Q43, Q44, Q44, Q44, Q44, Q44, Q44, Q44	SO195P230-3N	48	
	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, Q42, Q43, Q44, Q45, Q46, Q47,	SOT-6	48 1	
FAIRCHILD SEMICONDUCTOR - FDC6306P - MOSFET 2P-CH 20V 1.9A SSOT6	QS, Q6, Q7, Q8, Q9, Q10, Q11, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29, Q30, Q31, Q32, Q36, Q37, Q38, Q36, Q37, Q38, Q36, Q41, Q42, Q45, Q46, Q47, Q48, Q49, Q49, Q49, Q49, Q49			
FAIRCHILD SEMICONDUCTOR - BSS138 - MOSEFT N-CH 50V 220MA SOT-23 FAIRCHILD SEMICONDUCTOR - PDC6308P - MOSEFT 2P-CH 20V 1 9A SSOTI6 VISHAY SILUCONIX - SH4278DV-T1-E3 - MOSEFT 2P-CH 30V 9.7A B-SOIC Resistor, 8.1%, 0.1W, 0603	OS, OB, OT, OT, OT, OT, OT, OT, OT, OT, OT, OT	SOT-6 SOIC127P600-	1	91R 150R
**ABCHLID SEMICONDUCTOR - FOCISION - MOSETT 7"-CH 20V 1 9A SSOTE #SHAV SELICONEX - SH42780V-T1-E3 - MOSETT P-CH 30V 9.7A B-SONC Resistor , 2.1%, 0.1W, 0603 Resistor , 2.1%, 0.1W, 0603	OS, Ce, GY, Cis. OS, Cis. OS, Cis. GY, Cis. OS,	SOT-6 SORCI27P600- BAN RESCI608N	32 32	150R
AIRCHAD SEMCONDUCTOR - FDCGIGRP - MOSFET 72-CH 28V 1 9A SSOTIS ISHAY SELECINEX - SA44278DY-11-E3 - MOSFET P-CH 30V 9.7A 8-SOIC esistor, ±1%, 0.1W, 0663 esistor, ±1%, 0.1W, 0663	OS, Ce, G. Y. Ce, C. Y. Ce	SOT-6 SOICLIZ7P600- BAN RESC160BN RESC160BN	1 2 2 32 16	150R 10k
BREHBU SEMICONDUCTOR - FDCGIGGP - MOSFET 72-CH 20V 1 SA SSOTIS SHAY SALICONEX - SH442780V-TL-E3 - MOSFET P-CH 30V 97A B-SOIC BESTATO: ±1%, 0.1W, 0603 BESTATO: ±1%, 0.1W, 0603 BESTATO: ±1%, 0.1W, 0603	GS, GG, GT, GR, GS, GG, GT, GR, GS, GG, GT, GR, GS, GG, GG, GG, GG, GG, GG, GG, GG, GG	SOT-6 SOT-127960- BAN RESC160BN RESC160BN RESC160BN	32 32	150R 10k 470R
AIRCHAD SEMCONDUCTOR - FDCGIGRP - MOSFET 2*-CH 28V 1 9A SSOT6 ISHAY SELECINEX - SA44278DV-T1-E3 - MOSFET P-CH 30V 9.7A 8-SOIC esistor, ±1%, 0.1W, 0663 esistor, ±1%, 0.1W, 0663 esistor, ±1%, 0.1W, 0663 esistor, ±1%, 0.1W, 0663	OS, Ce, GY, Cis. OS, Cis.	SOT-6 SOT-16 SOCILIZ/PROD- BAN RESCI-60BN RESCI-60BN RESCI-60BN RESCI-60BN RESCI-60BN RESCI-60BN RESCI-60BN RESCI-60BN	32 32 16 22 5 1	150R 10k 470R 1M
AIRCHID SEMCONDUCTOR - FDC6368P - MOSFET 2*-CH 28V 1 9A SSOT6 SSHAV SELECONEX - S442278DY-T1-E3 - MOSFET P-CH 30V 9.7A 8-SOIC esistor, ±1%, 0.1W, 0603 esistor, ±1%, 0.1W, 0603 esistor, ±1%, 0.1W, 0603 esistor, ±1%, 0.1W, 0603	GS, GG, GT, GR, GS, GG, GT, GR, GS, GG, GT, GR, GS, GG, GT, GR, GS, GG, GG, GG, GG, GG, GG, GG, GG, GG	SOT-6 SOICLIZ/RGO- BAN RESCL60BN RESCL60BN RESCL60BN RESCL60BN RESCL60BN RESCL60BN RESCL60BN RESCL60BN	1 2 2 32 5 5 1 1 1 1	150R 10k 470R 1M 470k
AIRCHAD SEMICONDUCTOR - FDCGIGRP - MOSFET 2*-CH 20V 1 9A SSOTIS ISHAY SELECINEX - SI442780V-T1-E3 - MOSFET P-CH 30V 9.7A 8-SOIC esistor, a1%, 0.1W, 0603	OS, Ce, GY, Ce, Ce, Ce, Ce, Ce, Ce, Ce, Ce, Ce, Ce	SOT-6 SOICLIPPEGO- BAN RESCIGOBN RESCIGOBN RESCIGOBN RESCIGOBN RESCIGOBN RESCIGOBN RESCIGOBN RESCIGOBN	1 2 32 32 16 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k
AIRCHAD SEMICONDUCTOR - FDCSIGNP - MOSFET 2P-CH 20V 1 9A SSOTIS TSHAY SELICONEX - SI44278DY-T1-E3 - MOSFET P-CH 30V 9.7A 8-SOIC resistor, ±1%, 0.1W, 0603	GS C6 G7 C8 C9	SOT-6 SOT-16 SOT-17 SOT-17 RESC160BN	1 2 2 32 5 5 1 1 1 1	150R 10k 470R 1M 470k 698k 82k
ARCHED SEMICONDUCTOR - FDCGIGRP - MOSFET 2"-CH 20V 1 9A SSOTIS BSHAY SELECINEX - SI4427B0V-T1-E3 - MOSFET P-CH 30V 9.7A B-SOIC BSHAY SELECINEX - SI4427B0V-T1-E3 - MOSFET P-CH 30V 9.7A B-SOIC BSHAY SELECINEX - SI4427B0V-T1-E3 - MOSFET P-CH 30V 9.7A B-SOIC BSHAY SELECINEX - SI4427B0V-T1-E3 - MOSFET P-CH 30V 9.7A B-SOIC BSHAY SELECINEX - SI44, 0.1W, 06603 BSHAY SI45, 0.1W, 06603	GS, Ge, GY, GR, GY, GY, GY, GY, GY, GY, GY, GY, GY, GY	SOT-6 SOT-6 SOICIZPROO- BAN RESCIGOBN	12 22 22 5 11 1 1 1 1	150R 10k 470R 1M 470k 698k 82k 51k
AIRCHAD SEMICONDUCTOR - FDCGIGRP - MOSFET 2*-CH 20V 1 9A SSOTIS ISHAY SELICONEX - SA44278DV*11-E3 - MOSFET P-CH 30V 9.7A 8-SOIC BESISTOR , ±1%, 0.1W, 0603	GS C6 G7 C8 C9	SOT-6 SOICLIPPROO- BAN RESCLEOBIN	1 2 32 32 16 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k 82k
ARCHED SEMICONDUCTOR - FDCGIGRP - MOSFET 2"-CH 20V 1 9A SSOTIS BSHAY SELECINEX - SI4427B0V-T1-E3 - MOSFET P-CH 10V 9.7A B-SOIC BSHAY SELECINEX - SI4427B0V-T1-E3 - MOSFET P-CH 10V 9.7A B-SOIC BSHAY SELECINEX - SI4427B0V-T1-E3 - MOSFET P-CH 10V 9.7A B-SOIC BSHAY SELECINEX - SI4427B0V-T1-E3 - MOSFET P-CH 10V 9.7A B-SOIC BSHAY SELECINEX - SI44, 0.1W, 0603 BSHAY SI45, 0.1W, 0603	GS, GB, GT, GB, GS, GB, GT, GB, GS, GB, GT, GB, GB, GB, GB, GB, GB, GB, GB, GB, GB	SOT-6 SOT-6 SOICIZPROO- BAN RESCIGOBN	12 22 32 5 11 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k 82k 51k 2k
AIRCHAD SENCONDUCTOR - FDCSIGNP - MOSFET 2P-CH 20V 1 9A SSOTE TISHAY SELECTION - SE44278DY-T1-E3 - MOSFET P-CH 30V 9.7A 8-SOIC Lesistor, ±1%, 0.1W, 0603 L	GS, Ge, GY, GR, GY, GY, GY, GY, GY, GY, GY, GY, GY, GY	SOT-6 SOICIZPROO- BAN RESCIGOBN	1 2 22 22 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R
ABCHAD SEMICONDUCTOR - FDCGIGBF - MOSFET 2P-CH 20V 1 9A SSOTE ISHAY SILICONEX - SI4427BDY-T1-E3 - MOSFET P-CH 30V 97A B - SOIC ISHAY SILICONEX - SI4427BDY-T1-E3 - MOSFET P-CH 30V 97A B - SOIC ISHAY SILICONEX - SI4427BDY-T1-E3 - MOSFET P-CH 30V 97A B - SOIC ISHAY SILICONEX - SI4427BDY-T1-E3 - MOSFET P-CH 30V 97A B - SOIC ISHAY SILICONEX - SI4440 -	GS, Ge, GY, GR, GY, GY, GY, GY, GY, GY, GY, GY, GY, GY	SOT-6 SOICLIPPEOD- BAN RESCLEOBN	1 2 22 22 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R
AIRCHAID SEMICONDUCTOR - FOCSIGN P- MOSFET 2"-CH 20V 1 9A SSOTE TSHAV SELECONEX - SE442780Y-T1-E3 - MOSFET P-CH 30V 9.7A 8-5OKC SENSON - 11%, 0.1W, 0603 SENSON - 11%, 0.1W, 0.1W, 0.1W, 0.1W, 0.1W, 0.1W, 0.1W, 0.1W, 0.1W, 0.1	GS, Ge, GY, GR, GY, GY, GY, GY, GY, GY, GY, GY, GY, GY	SOT-6 SOICIZPROO- BAN RESCIGOBN	1 2 22 22 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R
ABCHAD SEMICONDUCTOR - FOCGISSP - MOSFET 2P-CH 20V 1 9A SSOTS ISHAY SILICONEX - SI6427BDY-T1-E3 - MOSFET P-CH 30V 9 7A 8 - SOIC Iteristor: ±1%, 0.1W, 0603 Iteristor: ±	OS, Ce, G. Y., Ce, C.	SOT-6 SOICIZPROO- BAN RESCLEOBN	1 2 22 22 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R
ABCHELD SENICONDUCTOR - FDCGISGR - MOSFET 2"-CH 20V 1 9A SSOTE ISHAY SILICONEX - SI4427BDY-T1-E1 - MOSFET P-CH 30V 9 7A 8 - SOIC Iseistor - £1%, 0.1W, 0603	GS, Ge, GY, GR, GY, GY, GY, GY, GY, GY, GY, GY, GY, GY	SOT-6 SOICLIPPROO- BAN RESCLOBIN RESCLOBIN RESCLOBIN RESCLOBIN	22 22 5 11 11 11 11 11 11 12 2	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R
ABCHELD SEMICONDUCTOR - FOCSION P - MOSFET 2"-CH 20V 1 9A SSOTE ASSAUR SERVICE SEMICONDUCTOR - FOCSION P - MOSFET 2"-CH 20V 1 9A SSOTE ASSAUR SERVICE SEMICONDUCTOR - FOCSION P - MOSFET P-CH 30V 9 7A 8 SONC Resistor , 11%, 0.1W, 0603 Resistor , 11%, 0	OS, Ce, G. Y., Ce, C.	SOT-6 SOICIZPEGO BAN RESCLEGEN	22 22 5 11 11 11 11 11 11 12 2	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R
ABACHAD SEMICONDUCTOR - FOCSIOR - MOSFET 2P-CH 20V 1 9A SSOTIS ASSAUR SERVICE - MOSFET P-CH 20V 9 7A 8 SOIC Resistor, 11%, 0.1W, 0603 RESISTOR -	GS, Ge, GY, GR, GY, GY, GY, GY, GY, GY, GY, GY, GY, GY	SOT-6 SOICLIZPROO- BAN RESCLEGOBN RESCLEGOBN RESCLEGOBN RESCLEGOBN RESCLEGOBN RESCL	1 2 22 22 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R
ABACHED SEMICONDUCTOR - FOCSION P - MOSFET 2"-CH 20V 1 9A SSOTIS ASSAURT SELECTION CONTROL - FOCSION P - MOSFET 2"-CH 20V 1 9A SSOTIS ASSAURT SELECTION CONTROL - FOCSION P - MOSFET P-CH 20V 9 7A 8 SOIIC Resistor - 11%, 0.1W, 0603 Resistor - 11%, 0.1W,	OS, Ce, GY, Cis. OS, Color, Cis. OS, Ci	SOT-6 SOICIZPROO- BAN RESCIGOBN	22 32 5 16 1 1 1 1 1 1 1 1 2 2	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R
ABACHED SEMECONDUCTOR - FOCSION - MOSFET 72-CH 20V 1 9A SSOTIS ASSAUR SELECTION - SEMECONDUCTOR - FOCSION - MOSFET 72-CH 20V 1 9A SSOTIS ASSAUR SELECTION - SEMECONDUCTOR - FOCSION - MOSFET 72-CH 20V 9 7A 8 SOIIC Resistor, #1%, 0.1W, 0603 Resistor, #1%, 0.1W, 0	GS, GG, GT, GR, GT, GT, GT, GT, GT, GT, GT, GT, GT, GT	SOT-6 SOICLIPPROO- BAN RESCLEOBN RESCLEOBN RESCLEOBN RESCLEOBN RESCLEOBN RESCLEOB	16 222 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R
ABACHED SEMICONDUCTOR - FOCSION P - MOSFET 2"-CH 20V 1 9A SSOTIS ASSAURT SELECTION CONTROL - FOCSION P - MOSFET 2"-CH 20V 1 9A SSOTIS ASSAURT SELECTION CONTROL - FOCSION P - MOSFET P-CH 20V 9 7A 8 SOIIC Resistor - 11%, 0.1W, 0603 Resistor - 11%, 0.1W,	OS, Ce, GY, Cis. OS, Color, Cis. OS, Ci	SOT-6 SOICIZPROO- BAN RESCIGOBN	1 2 22 22 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150R 10k 470R 1M 470k 698k 82k 51k 2k 330R