







Comment	Description	Designator	Footprint	LibRef	Quantity	Value
Capacitor	Capacitor	C1, C2, C3, C4 C5, C6, C7, C8,	CAP-0402	Capacitor	4	900pF
		C13, C15, C20, C26, C27, C29,				
		C36, C37, C38,				
Capacitor	Capacitor	C42, C43, C44, C45, C46	CAP-0805	Capacitor	18	100nF
		C9, C10, C11, C12, C14, C21, C28.				
Capacitor	Capacitor	C14, C21, C28, C35, C39, C47	CAP-0805	Capacitor	10	22uF
MAL215099911E3		C16, C17, C18, C19	CAP-1621	Electrolytic Capacitor	4	330uF
Capacitor	Capacitor	C22, C23, C24, C25	CAP-0805	Capacitor	4	1uF
Capacitor	Capacitor	C30, C31, C32, C33	CAP-0805	Capacitor	4	10uF
Electrolytic Capacitor		C34, C41	CAP - H13	Electrolytic Capacitor	2	330uF
				Electrolytic		150uF
20SVP150M US1M-E3		C40	CAP-F12 DO-214AC	Capacitor	1 4	150uF
SBR2A40P1	Schottler Bostifler	D1, D2, D3, D4 D5, D7, D8	POWERDI-123	SBR2A40P1	3	
3BR2A40F1	Schottky Rectifier Variable voltage	D3, D7, D6	FOWERDI-123	3BRZN40F1	3	
TL431AIDBZT, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG, BSS13BLHTG,	Variable voltage reference, N- Channel MOSFET, N-Channel MOSFET, N	D6, Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q14, Q15, Q16, Q17, Q18, Q16, Q17, Q18, Q17, Q		TL431AIDBZT, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG, BSS138LITIG,		
BSS138LT1G,	MOSFET	Q19, Q17, Q18,	SOT-23B	BSS138LT1G, BSS138LT1G	16	
RERGSTAK 100P	100p connector, BERGSTAK	JX1. JX2	FCI_BERGSTAK_100	BERGSTAK 100P	_	
2.2uH	SRN5020-2R2Y	JX1, JX2 L1	SRN5020-2R2Y_FP	SRN5020-2R2Y	1	2.2uH
ZH-6P	vuozu-zRZT	P1. P4	ZH-6P	ZH-6P	2	
ZH-12P		P2. P3. P6	ZH-12P	ZH-12P	3	
ZH-4P		P5, P7	ZH-4P	ZH-4P	2	
2P Terminal, Emergency Button		P8, Q13	2P-TERM	2P Terminal, Emergency Button	2	
ZH-5P		P9, P10	ZH-5P	ZH-5P	2	
TLV3492		Q10	SOT23-8	TLV3492	1	
FX2 Relay		Q11	G6BK	FX2 Relay	1	
LEV100A4ANG		Q12		LEV100A4ANG	1	
IRF100B202		Q20, Q21, Q22, Q23	TO-220AB	IRF 100B202	4	
		R1, R3, R5, R7, R8,				
Resistor	Resistor	R11, R13, R14 R2, R6, R10, R42,	RES-0402	Resistor	8	100R
		R43, R45, R67,				
Resistor	Resistor	R69, R71, R73, R74, R75	RES-0805	Resistor	12	330R
		R4, R12, R15, R17,				
Resistor	Resistor	R68, R72	RES-0805	Resistor	6	85R
Resistor	Resistor	R9, R16, R70 R18, R20	RES-0805 RES-0805	Resistor	3	145R 2k2
Resistor Resistor	Resistor Resistor	R19, R21	RES-0805	Resistor Resistor	2	150R
Resistor	Resistor	R22, R23, R24	RES-0805	Resistor	3	2k7
Resistor	Resistor	R25, R32	RES-2512	Resistor	2	4R7 2W
Resistor	Resistor	D24 D27 D20 D21	RES-0805	Resistor		7R
Resistor	Resistor	R26, R27, R28, R31 R29, R30	RES-0805	Resistor	2	220k
Resistor	Resistor	R33	RES-3920	Resistor	1	200uR
Resistor	Resistor	R34, R38	RES-0805	Resistor	2	68k
Resistor Resistor	Resistor Resistor	R35, R36, R39, R41 R37	RES-0805 RES-RWS5	Resistor Resistor	1	33k 180R 5W
		R40, R44, R59,				
Resistor	Resistor	R60, R66	RES-0805	Resistor	5	3k92
Resistor	Resistor Resistor	R46	RES-0805 RES-0805	Resistor	1	1k5
Resistor Resistor	Resistor Resistor	R47 R48, R50, R58	RES-0805 RES-0805	Resistor Resistor	1	3k 1k
Resistor	Resistor	R48, R50, R58	RES-0805	Resistor	1	1K 45k3
Resistor	Resistor	R51	RES-0805	Resistor	1	100k
Resistor	Resistor	R52	RES-0805	Resistor	1	10k
Resistor	Resistor	R53	RES-0805	Resistor	1	
Resistor	Resistor	R54	RES-0805	Resistor		383k1%
Resistor	Resistor	R55	RES-0805	Resistor	1	348R1%
Resistor	Resistor	R56, R57, R63	RES-0805	Resistor	3	
Resistor	Resistor	R61	RES-0805	Resistor	1	
Resistor	Resistor	R62	RES-0805	Resistor	1	
Resistor	Resistor	R64	RES-0805	Resistor	1	430R
Resistor	Resistor	R65	RES-0805	Resistor	1	120R
RGB LED		RGB1, RGB2, RGB3	RGB_LED	LTRB R8SF	3	
1101M2S3CQE2 NRF24L01 Module		SW1 U1	1101M2S3CQE2_FP NRF24L01 Module	1101M2S3CQE2 NRF24L01 Module	1	
NRF24L01 Module INA286		U1 U2	NRF24L01 Module SOIC-8	INA286	1	
	74LVC2G17 Dual non-inverting					
	Schmitt-trigger					
74LVC2G17	with 5v tolerant input	U3	SOT-363	74LVC2G17	,	
HIP4081	put	U4	SOIC-20 WB	HIP4081	1	
	[NoValue],					
NC7SZ08, NC7SZ08,	[NoValue], IC SMD AMP+COMPAR			NC7SZ08, NC7SZ08,		
LMV331QDBVRQ1,	Combo SOIC-8,			LMV331QDBVRQ1,		
LMR10510XMF	[NoValue] Dual 4-Input AND	U5, U6, U8, U9	SOT23-5	LMR10510XMF	4	
SN74F21D	Gate	U7	SOIC-14	SN74F21D	1	
PTN78020HAH		U10	PTN78020	PTN78020HAH	1	