Comment	Description	Designator	Footprint	LibRef	Quantity
10uF	Generic Cap, 5MM	C1, C2, C4, C5	Cap, 5mm TH,	Cap, 5MM TH,	
	TH, Ceramic Generic Cap, TH,		Ceramic CAPPRD200W50D550	Ceramic Cap, TH,	
10uF	Electrolytic	C3	H1250	Electrolytic_5mm	1
0.68uF	Generic Cap, 5MM TH, Ceramic	C6, C11	Cap, 5mm TH, Ceramic	Cap, 5MM TH, Ceramic	1
10nF	Generic Cap, 5MM	C7, C10, C16, C21,	Cap, 5mm TH,	Cap, 5MM TH,	
TUNF	TH, Ceramic	C22, C25	Ceramic	Ceramic	
500nF	Generic Cap, 5MM TH, Ceramic	C8	Cap, 5mm TH, Ceramic	Cap, 5MM TH, Ceramic	1
475	Generic Cap, 5MM	00	Cap, 5mm TH,	Cap, 5MM TH,	
47uF	TH, Ceramic	C9	Ceramic	Ceramic	
100nF	Generic Cap, 5MM	C12, C13, C14, C19,	Cap, 5mm TH, Ceramic	Cap, 5MM TH,	8
	TH, Ceramic Generic Cap, 5MM	C20, C23, C24, C26	Cap, 5mm TH,	Ceramic Cap, 5MM TH,	
4.7uF	TH, Ceramic	C15, C18	Ceramic	Ceramic	1
1uF	Generic Cap, 5MM	C17	Cap, 5mm TH, Ceramic	Cap, 5MM TH,	1
	TH, Ceramic Generic Cap, 5MM		Cap, 5mm TH,	Ceramic Cap, 5MM TH,	
18pF	TH, Ceramic	C27, C28	Ceramic	Ceramic	-
48MHz	SWITCHMODE(TM)	Crystal	CrystalOscillator	CrystalOscillator	1
MUR180ERLG	Power Rectifier, Ultrafast 'E' Series with High Reverse Energy Capability, 2- Pin Axial_Lead, Pb- Free, Tape and Reel	D1	ONSC-AXIAL_LEAD-2- 59-10_P	CMP-0902-00111-1	,
HRTBT	LED, 5mm, TH	D2	LED, TH	LED, TH	1
SHUTDOWN	LED, 5mm, TH	D3	LED, TH	LED, TH	
CANRX CANTX	LED, 5mm, TH LED, 5mm, TH	D4 D5	LED, TH LED, TH	LED, TH LED, TH	
RESET	LED, 5mm, TH	D6	LED, TH	LED, TH	
5V	LED, 5mm, TH	D7	LED, TH	LED, TH	1
12V_FUSED 2A	LED, 5mm, TH Fuse	D8 F1	LED, TH FUSE 20MM	LED, TH Fuse 2	
4n		1.1	I USE ZUIVIIVI	u ust Z	
ACT45B-220-2P-TL003	100AµH @ 100kHz 2 Line Common Mode Choke Surface Mount 5.8 kOhms @ 10MHz 150mA DCR 20hm	FL1	FIL_ACT45B-220-2P- TL003	ACT45B-220-2P-TL003	1
SAMTEC-FTSH-105-01 X-D	position 0.050" _1.27mm_	J1	SAMTEC-FTSH-105-01- X-D	SAMTEC-FTSH-105-01- X-D	1
4pin Header	THT Vertical Pin Header WR-PHD, Pitch 2.54 mm, Single Row, 4 pins	J2	61300411121	CMP-1502-01064-1	1
30700-5080	Molex 8 Position High Density Board Header	J3	30700-5080	30700-5080	1
43650-0209	Molex 2 Position Board Header, Right Angle	J4	43650-0209	43650-0209	1
PE-68386NLT	No Description Available	PulseTransformer1	PE-68386NL_PUL	PE-68386NLT	1
SSM3K329R,LF	N-Channel MOSFET,	Q1. Q2	SOT23-3	SSM3K329R.LF	
331VI3K3Z9K,LF	30V, 3.5A		30123-3	33IVI3K3Z9R,LF	
Value?	Generic TH Resistor	R1, R2, R3, R4, R5, R6, R7	Resistor, TH	Resistor, TH	1
100k	Generic TH Resistor	R8. R14	RESAD640W45L370D	Decision Til	
			200 - duplicate	Resistor, TH	
12K	Generic TH Resistor	R9, R12	Resistor, TH	Resistor, TH	-
3.09K 1.60K	Generic TH Resistor Generic TH Resistor	R10, R13 R11, R15	Resistor, TH Resistor, TH	Resistor, TH Resistor, TH	
10K	Generic TH Resistor	R16, R34, R36	1/4W TH Resistor	Resistor, TH	
10k	Generic TH Resistor	R17	RESAD640W45L370D	Resistor, TH	
2k	Generic TH Resistor	R18, R27	200 - duplicate 1/4W TH Resistor	Resistor, TH	
	Chip Resistor, 0 Ohm,				
	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric), RoHS, Tape and Reel	R19, R20, R22, R23, R24, R25	RESC2013X60X35LL20 T20	CMP-2000-06973-1	
806r .1%	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric), RoHS, Tape and Reel Generic TH Resistor		T20 1/4W TH Resistor	CMP-2000-06973-1 Resistor, TH Resistor, TH	
806r .1% 1.21k .1%	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric) , RoHS, Tape and Reel Generic TH Resistor Generic TH Resistor	R24, R25 R21 R26	T20 1/4W TH Resistor 1/4W TH Resistor RESAD640W45L370D	Resistor, TH Resistor, TH	
806r .1% 1.21k .1%	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric), RoHS, Tape and Reel Generic TH Resistor	R24, R25 R21	T20 1/4W TH Resistor 1/4W TH Resistor RESAD640W45L370D 200 - duplicate	Resistor, TH	
806r .1% 1.21k .1% 120r	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric) , RoHS, Tape and Reel Generic TH Resistor Generic TH Resistor	R24, R25 R21 R26	T20 1/4W TH Resistor 1/4W TH Resistor RESAD640W45L370D 200 - duplicate RESAD640W45L370D	Resistor, TH Resistor, TH	
806r . 1% 1.21k . 1% 120r	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric), RoHS, Tape and Reel Generic TH Resistor Generic TH Resistor Generic TH Resistor	R24, R25 R21 R26 R28 R29, R31	T20 1/4W TH Resistor 1/4W TH Resistor RESAD640W45L370D 200 - duplicate	Resistor, TH Resistor, TH Resistor, TH Resistor, TH	:
806r .1% 1.21k .1% 120r 62r	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric), RoHS, Tape and Reel Generic TH Resistor Generic TH Resistor Generic TH Resistor Generic TH Resistor	R24, R25 R21 R26 R28 R29, R31 R30, R32	T20 1./4W TH Resistor 1./4W TH Resistor RESAD640W45L370D 200 - duplicate RESAD640W45L370D 200 - duplicate RESAD640W45L370D 200 - duplicate	Resistor, TH Resistor, TH Resistor, TH Resistor, TH Resistor, TH	:
806r .1% 1.21k .1% 120r 62r 300r	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric), RoHS, Tape and Reel Generic TH Resistor Generic TH Resistor Generic TH Resistor Generic TH Resistor Generic TH Resistor Generic TH Resistor	R24, R25 R21 R26 R28 R29, R31 R30, R32 R33, R35	T20 1/4W TH Resistor 1/4W TH Resistor RESAD640W45L370D 200 - duplicate RESAD640W45L370D 200 - duplicate 1/4W TH Resistor	Resistor, TH	
806r .1% 1.21k .1% 120r 62r 300r	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric), RoHS, Tape and Reel Generic TH Resistor Generic TH Resistor Generic TH Resistor Generic TH Resistor	R24, R25 R21 R26 R28 R29, R31 R30, R32	T20 1./4W TH Resistor 1./4W TH Resistor RESAD640W45L370D 200 - duplicate RESAD640W45L370D 200 - duplicate RESAD640W45L370D 200 - duplicate	Resistor, TH Resistor, TH Resistor, TH Resistor, TH Resistor, TH	
806r .1% 1.21k .1% 120r 62r 300r 160r 5015	Chip Resistor, 0 Ohm, +/- 5%, 0.125 W, -55 to 155 degC, 0805 (2012 Metric), RoHS, Tape and Reel Generic TH Resistor Generic TH Resistor Generic TH Resistor Generic TH Resistor Generic TH Resistor Generic TH Resistor	R24, R25 R21 R26 R28 R29, R31 R30, R32 R33, R35 TP_CS, TP_MISO, TP_MOSI, TP_SCK	T20 1/4W TH Resistor 1/4W TH Resistor RESAD640W45L370D 200 - duplicate RESAD640W45L370D 200 - duplicate RESAD640W45L370D 200 - duplicate 1/4W TH Resistor 5015	Resistor, TH Sol15	
806r.1% 1.21k.1% 120r 62r 300r 160r 5015	Chip Resistor, O Ohm, -7.5%, 0.125 W, -55 to 155 degc, 0805 to 155 degc, 0805 (2012 Metric), RoHS, Tape and Reel Generic TH Resistor	R24, R25 R21 R26 R28 R29, R31 R30, R32 R33, R35 TP_CS, TP_MISO,	T20 1/4W TH Resistor 1/4W TH Resistor RESAD640W45L370D 200 - duplicate RESAD640W45L370D 200 - duplicate 1/4W TH Resistor	Resistor, TH	
806r 1% 121k.1% 122r 120r 62r 300r 160r 5015 1000 LM1117T-3.3	Chip Resistor, O Ohm, -7-5%, 0.125 W, -55 to 155 degC, 0805 Co12 Merici), RoHS, Tape and Reel Generic TH Resistor Tolory The State of The State	R24, R25 R21 R26 R28 R29, R31 R30, R32 R33, R35 TP_CS, TP_MISO, TP_SCK U1	124W TH Resistor 1/4W TH Resistor 1/4W TH Resistor RESAD-6/0W461.370D 200 - duplicate RESAD-6/0W461.370D 200 - duplicate RESAD-6/0W461.370D 200 - duplicate 1/4W TH Resistor 5015 CONV_VXO7805-1000 T0254P1054X470X19	Resistor, TH Solidary VXO7805-1000	:
806r 1% 1.21k 1% 1.21k 1% 62r 300r 160r 5015 VXO7805-1000 LM1117T-3.3	Chip Resistor, O Ohm, -7-5%, 0.125 W55 to 155 degC, 0805 to 155 degC, 0805 CQ12 Metric), RoHS, Tape and Reel Generic TH Resistor Seneric TH Resistor Generic TH Resistor SMD Test Point 800-mA 15-V linear voltage regulator 3- TO-220 to 10:25 Swicth, SPT, 24 V., 35 SMD Test Point SMD Resistor 3- TO-220 to 10:25 Swicth, SPT, 24 V., 35 SMO Test Point SMD Resistor 3- TO-230 to 10:25 Swicth, SPT, 24 V., 35 SMO Test Point SMD Resistor 3- TO-230 to 10:25 Swicth, SPT, 24 V., 35 SMO Test Point SMD Resistor 3- TO-230 to 10:25 Swicth, SPT, 24 V., 35 SMO Test Point SMD Resistor 3- TO-230 to 10:25 SMO Test Point SMD Resistor 3- Test Point SMD Resi	R24, R25 R21 R26 R28 R29, R31 R30, R32 R33, R35 TP_CS, TP_MISO, TP_MOSI, TP_SCK U2	1720 174W TH Resistor 174W TH Resistor 174W TH Resistor 1854D-640W51370D 200 - duplicate 1854D-640W51370D 200 - duplicate 1854D-640W51370D 200 - duplicate 174W TH Resistor 5015 CONV_VXO7805-1000 T0254P1054X470X19 55-3 TECO_FSM4JSMA_V	Besistor, TH Resistor, TH Resistor, TH Resistor, TH Resistor, TH Resistor, TH Resistor, TH Sol15 VXO7805-1000 LM1117T-3.3 CMP-2000-0748B-1	
120r 62r 300r 160r 5015	Chip Resistor, O Ohm, -7-5%, 0.125 W, -55 to 155 degC, 0805 to 155 degC, 0805 Generic TH Resistor SAND Test Point 800-mA 15-V linear voltage regulator -3 TO-220 to 10 125 Switch, SPST, 24 V, -35 Switch, SPST, 24 V, -36 Kell EI MONE, Tape and Reel LIC MCU 238IT 256KB RUSH 1628H CHENTER LIC MCM 238IT 256KB RUSH 238	R24, R25 R21 R26 R28 R29, R31 R30, R32 R30, R32 R31, R35 TP_CS, TP_MISO, TP_MOSI, TP_SCK U1 U2	1720 174W TH Resistor 200 - duplicate 185A0-640W51370D 200 - duplicate 185A0-640W51370D 200 - duplicate 185A0-640W51370D 200 - duplicate 174W TH Resistor 5015 CONV_WX07805-1000 T0254P1054X470X19 55-3 TECO-FSM4JSMA_V **CFP50P1200X1200X 160-64N SOIC127P1032X265-	Resistor, TH VXO7805-1000 LM117T-3.3	
806r.1% 1.21k.1% 120r 62r 300r 160r 5015 VXXO7805-1000 LM1117T-3.3 Reset Button	Chip Resistor, O Ohm, -7-5%, 0.125 W, -55 to 155 degC, 0805 to 155 degC, 0805 Conrac TH Resistor Generic TH Resistor SMD Test Point 800-mA 15-V linear voltage regulator 3- TO-220 to 125 SWICH, SPST, 24 V, -35 to 85 degC, 4-Pin SMD, RotHS, Tape and Reel IC MCU 328IT 256KB FLASH GLOFP	R24, R25 R21 R26 R27 R28 R29, R31 R30, R32 R33, R35 TP_MOSJ, TP_MOSJ, TP_SCK U1 U2 U3	174W TH Resistor 200 - duplicate RESADe640W51370D 200 - duplicate RESADe640W51370D 200 - duplicate 174W TH Resistor 5015 CONV_XX07805-1000 10254P1054X470X19 55-3 TECO_FSM4JSMA_V *GFP50P1200X1200X 180-64N	Resistor, TH So15 VXO7805-1000 LM1117T-3.3 CMP-2000-07488-1 CMP-12105-000069-1	











