



Qty	CAT	PART#	PKG/MNT	LABEL	DESC
1	Capacitor	500R07S1R8BV4T	0402	C40	RF Capicator
2	Capacitor		0603	C9, C59	2.2nF
4	Capacitor		0603	C8, C11, C19, C43	10nF
1	Capacitor		1206	C44	22μF
1	Capacitor		Panasonic E	C42	100μF (Polarized)
1	Capacitor		0805	C41	1μF (Polarized)
5	Capacitor		Panasonic G	C4, C5, C7, C10, C14	470μF (Polarized)
3	Capacitor		0603	C3, C31, C34	1μF
1	Capacitor		0603	C20	1nF
39	Capacitor		0603	C2, C6, C17, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C32, C33, C35, C36, C37, C38, C39, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C60, C67, C68, C71, C77, C79	100nF
1	Capacitor		0603	C18	33pF
2	Capacitor		0603	C15, C16	27pF
1	Capacitor		0603	C13	100pF
1	Capacitor		0603	C12	220nF
1	Capacitor		0805	C1	10μF
1	Connector	UX60A-MB-5ST	SMD	J2	Mini USB 2.0 Receptacle
2	Connector	B2PS-VH(LF)(SN)	Through Hole	J11, J19	Battery Header
1	Connector	5285-20870	SMD	J1	Kicker Header
1	Connector	35363-0860	Through Hole	J17	Dribbler Header
1	Connector	35363-0660	Through Hole	J10	JTAG Header
4	Connector	35363-0460	Through Hole	J13, J14, J15, J16	Encoder Header
1	Connector	35363-0360	Through Hole	J9	Detector Header
1	Connector	35363-0260	Through Hole	J3	LED Header

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1	Connector	1408151-1	Through Hole	J8	Antenna Jack
4	Connector	0522711179	SMD	J4, J5, J6, J7	Motor Header
1	Diode	SMBJP6KE18A-TP	DO-214AA (SMB)	D6	Suppressor Diode
2	Diode	MBRX160-TP	SOD-123	D1, D2	Schottky Barrier Rectifier Diode
1	Diode	BAS16H	SOD-123F	D3	High-Speed Switching Diode
2	Diode	564-0100-132F	Through Hole	D4, D5	RGB LED Array
1	Diode		0603	LED1	LED
1	IC	XC3S100E-4TQG144	144-LQFP	U1	Spartan-3E FPGA
1	IC	M25P10-AVMN6TP	SOIC-8	U2	1Mbit Serial Flash Memory
1	IC	KXTF9-2050	10-VFLGA	U20	Accelerometer
1	IC	IMU-3000	36-QFN	U19	Inertial Measurement Unit
1	IC	AT91SAM7S256	64-LQFP	U7	Microcontroller
1	Inductor	SDR0403-270KL	SMD	L1	Power Inductor
1	Inductor	L-07C5N6SV6T	0402	L4	RF Ceramic Inductor
3	Inductor	HZ0603B102R-10	0603	L2, L3, L5	Ferrite EMI Chip Bead
1	Oscillator	644-1055-1-ND	SMD	X2	27.000MHz Crystal Oscillator
1	Oscillator		SMD	X1	18.432MHz Crystal Oscillator
1	Other	PS1240P02BT	Through Hole	BZ1	Piezo Buzzer
1	Other	FUSESF-1206F100-2	1206	F2	Small Fuse
2	Other	BK6011	Through Hole	F1	Fuseholder
1	Other	947705-012			Selector Knob
4	Other		0603	R11, R80, R105, R115	Not populated
1	Other			J20	Spare FPGA Pins (Not Populated)
1	Other			J12	Voltage Test Points (Not Populated)

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15	Power	TC4428	SOIC-8	U6, U9, U12, U15, U18, U21, U24, U27, U30, U33, U36, U39, U42, U45, U48	MOSEFT Driver
1	Power	MCP1824T-2502E/OT	SOT-23-5	U5	2.5V, 0.3A Regulator
1	Power	MCP1824T-1202E/OT	SOT-23-5	U4	1.2V, 0.3A Regulator
1	Power	MCP1824ST-3302E/DB	SOT-223-3	U8	3.3V, 0.3A Regulator
1	Power	LM2734XMKX/NOPB	SOT-23-6	U3	DC-DC Switching Regulator
15	Power	IRF9310TRPbF	SOIC-8	Q1, Q3, Q5, Q7, Q9, Q11, Q13, Q15, Q17, Q19, Q21, Q23, Q25, Q27, Q29	P-channel Power MOSFET
15	Power	IRF8734TRPbF	SOIC-8	Q2, Q4, Q6, Q8, Q10, Q12, Q14, Q16, Q18, Q20, Q22, Q24, Q26, Q28, Q30	N-channel Power MOSFET
1	Power	FDV304P	SOT-23	Q33	MOSFET
1	Radio	CC1101	32-VQFN	U10	UHF Transceiver
1	Radio	0896BM15A0001	0805	U13	Balun Filter
1	Resistor		0603	R95	56kΩ
1	Resistor		0606	R93	27Ω
1	Resistor		0805	R9	150Ω
14	Resistor		0606	R89, R90, R91, R92, R103, R119, R122, R123, R124, R125, R128, R129, R130, R131	220Ω Array (2)
1	Resistor		0603	R83	52.3kΩ
1	Resistor		0603	R81	68kΩ
1	Resistor		0603	R78	5.6kΩ
42	Resistor		0603	R2, R5, R7, R8, R12, R20, R21, R24, R25, R28, R29, R32, R33, R36, R37, R40, R41, R44, R45, R48, R49, R52, R53, R56, R57, R60, R61, R64, R65, R68, R69, R72, R73, R76, R77, R82, R84, R96, R97, R111, R112, R116	10kΩ
30	Resistor		0603	R18, R19, R22, R23, R26, R27, R30, R31, R34, R35, R38, R39, R42, R43, R46, R47, R50, R51, R54, R55, R58, R59, R62, R63, R66, R67, R70, R71, R74, R75	10Ω
3	Resistor		0603	R17, R94, R110	1.5kΩ
1	Resistor		0603	R16	100kΩ
5	Resistor		0603	R14, R15, R102, R113, R114	0Ω

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2	Resistor		0603	R108, R109	330k Ω
4	Resistor		0603	R10, R13, R79, R107	220 Ω
12	Resistor		1206	R1, R3, R4, R6, R85, R86, R87, R88, R104, R117, R118, R120	220 Ω Array (4)
1	Switch	M2022S2A2W30	Through Hole	S3	DPDT Toggle Switch
1	Switch	KMR 2	SMD	S4	Tactile Button Switch
1	Switch	B3F-3120	Through Hole	S2	Tactile Switch
1	Switch	94HBB16RAT	Through Hole	S5	Selector
1	Switch	219-4LPST	SMD	S1	Dip Switch Array