Part No	Comp	Circuit	Labels	Comp Description	Quantity	Cost (\$)/Unit	Pricing Link	Datasheet Additional Notes
952-2121-ND	Connector	microcontroller	J1	In Circuit Serial Programming Connector Header Through Hole 6 position 0.100" (2.54mm)		1 0	.34 https://www.digikey.ca/product-detail/en/harwin-inc/M20-9980346/952-2121-ND/3728085 t	https://cdn.harwin.com/pdfs/M20-998.pdf
490-1198-1-ND	Cystal	microcontroller	CR1	16MHz Ceramic Resonator Built in Capacitor 15pF ±0.3% -20°C ~ 80°C Surface Mount		1 0	p.71 https://www.digikey.ca/products/en?keywords=490-1198-1-ND	https://www.murata.com/~/media/webrenewal/support/library/catalog/products/timingdevice/ceralock/p16e.ashx
ATMEGA328P-AU-ND	Micro Controller	microcontroller	Z1	AVR AVR® ATmega Microcontroller IC 8-Bit 20MHz 32KB (16K x 16) FLASH 32-TQFP (7x7)		1 3	1.14 https://www.digikey.ca/products/en?keywords=ATMEGA328P-AU-ND	http://wwf.microchip.com/downloads/en/DeviceDoc/Atmel-42735-8-bit-AVR-Microcontroller-ATmega328-328P_Summary.pdf
CKN9104CT-ND	Switch	microcontroller	SW1	Tactile Switch SPST-NO Top Actuated Surface Mount		1 0	.58 https://www.digikey.ca/products/en?keywords=CKN9104CT-ND	https://www.ckswitches.com/media/1467/pts525.pdf
	Light Emitting Diode	microcontroller	D1			1		
311-10.0KHRCT-ND	Resistor	microcontroller	R1-R2	10 kOhms ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Resistant Thick Film		2 0	.15 https://www.digikey.ca/products/en?keywords=311-10.0KHRCT-ND	http://www.yageo.com/documents/recent/PYu-RC_Group_51_RoHS_L_9.pdf
HCSR04	Sensor	UltraSonic Range Rinde	er HCSR04	Ultrasonic Sensor 40kHz		1 5	.99 https://www.digikey.ca/products/en?keywords=HC-SR04	https://cdn.sparkfun.com/datasheets/Sensors/Proximity/HCSR04.pdf
1490-1033-2-ND	Integrated Circuit	RF	Z2	IC RF TxRx Only General ISM > 1GHZ 2.4GHz 20-VFQFN Exposed Pad		1 2.392	279 https://www.digikey.ca/product-detail/en/nordic-semiconductor-asa/NRF24L01P-R7/1490-1	http://www.nordicsemi.com/eng/content/download/2726/34069/ftle/nRF24L01P_Product_Specification_1_0.pdf
SER3630TR-ND	Crystal	RF	CR2	16MHz ±10ppm Crystal 9pF 60 Ohms 4-SMD, No Lead		1	0.1 https://www.alibaba.com/product-detail/-Winsome-TSX-4025-16-000000_774129121.html t	https://media.digikey.com/pdf/Data%20Sheets/Epson%20PDFs/TSX-4025.5032.pdf
1276-3564-2-ND	Resistor	RF	R3	1 MOhms ±5% 0.03W, 1/32W Chip Resistor 01005 (0402 Metric) Moisture Resistant Thick Film		1 0.020	386 https://www.digikey.ca/product-detail/en/samsung-electro-mechanics/RC0402J105CS/127	http://www.samsungsem.com/kr/support/product-search/chip-resistor/icsFiles/afleldfile/2015/05/18/RC_DataSheet_(150330).pdf
541-4253-2-ND	Resistor	RF	R4	RES 22K OHM 1% 1/32W 01005		1 0.043	388 https://www.digikey.ca/product-detail/en/vishay-dale/CRCW010022K0FREL/541-4253-2-N	http://www.vishay.com/docs/20056/crcw01005e3.pdf
445-9474-1-ND	Inductor	RF	L1	8.2nH Unshielded Multilayer Inductor 140mA 1.8 Ohm Max 01005 (0402 Metric)		1 0	.51 https://www.digikey.ca/product-detail/en/tdk-corporation/MLG0402Q8N2JT000/445-9474-1	https://product.tdk.com/info/en/catalog/datasheets/inductor_commercial_high-frequency_mlg0402q_en.pdf
A103706TR-ND	Inductor	RF	L2	FIXED IND 2.7NH 640MA 120 MOHM		1 0.336	https://www.digikey.ca/product-detail/en/te-connectivity-passive-product/36501E2N7JTDG1	http://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchrtnv&DocNm=1624112&DocType=Customer+Drawing&DocLang=English
HK10053N9J-T-ND	Inductor	RF	L3	3.9nH Unshielded Multilayer Inductor 500mA 210 mOhm Max 0402 (1005 Metric)		1 0.027	735 https://www.digikey.ca/product-detail/en/taiyo-yuden/HK10053N9J-T/HK10053N9J-T-ND/	https://www.yuden.co.jp/productdata/catalog/mlci04_e.pdf
490-13502-1-ND	Capacitor	RF	C1-C2	22pF 25V Ceramic Capacitor C0G, NP0 01005 (0402 Metric) 0.016" L x 0.008" W (0.40mm x 0.20mm))	2 0	.16 https://www.digikey.ca/products/en/capacitors/ceramic-capacitors/60?FV=ffe0003c%2Cc0	https://search.murata.co.jp/Ceran Picked this one because it is the only one available for ordering + it is the cheapest
810-CGA2B2X7R1H222KB	Capacitor	RF	C3	Multilayer Ceramic Capacitors MLCC - SMD/SMT SOFT 0402 50V 2200pF X7R 10% T: 0.5mm		1 0	.24 https://www.mouser.ca/ProductDetail/TDK/CGA2B2X7R1H222K050BE?qs=sGAEpiMZZMs	ISOANBNWHyRQQuo8k2TQK6 % This one was cheapest and fit all the requirements, note the voltage rating is 50V but that is okay since our max voltage rating is 3.3V
581-0402ZJ4R7CBS	Capacitor	RF	C4	Multilayer Ceramic Capacitors MLCC - SMD/SMT 10V 4.7pF ThnFlm0402 .25pF Tol		1 1	.01 https://www.mouser.ca/ProductDetail/AVX/0402ZJ4R7CBSTR?qs=sGAEpiMZZMs0AnBnW	WHyRQN%252bpWPQa4offvInhWy7m4vk%3d
445-4858-2-ND	Capacitor	RF	C5	1.5pF 50V Ceramic Capacitor C0G, NP0 0402 (1005 Metric) 0.039" L x 0.020" W (1.00mm x 0.50mm)		1 0.013	309 https://product.tdk.com/info/en/catalog/datasheets/mlcc_commercial_general_en.pdf	
77-VJ0402A1R0BXQPBC	Capacitor	RF	C6	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0402 1.0pF 10volts C0G +/-0.1pF		1 0	.14 https://www.mouser.ca/ProductDetail/Vishay-Vitramon/VJ0402A1R0BXQPW1BC?qs=sGAI	EpiMZZMs0AnBnWHyRQISGU2VjexwghZfdXyS5ZCw%33d
80-C1206C332KBRAUTO	Capacitor	RF	C7	Multilayer Ceramic Capacitors MLCC - SMD/SMT 630V 3300pF X7R 1206 10% AEC-Q200		1 1	.31 https://www.mouser.ca/datasheet/2/212/KEM_C1076_X7R_HV_AUTO_SMD-1093301.pdf	
81-GMD155R71C104KA1D	Capacitor	RF	C8	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0402 16V 0.1uF X7R 10%		1 1	.37 https://www.mouser.ca/ProductDetail/Murata-Electronics/GMD155R71C104KA11D?qs=sG	SAEpiMZZMs0AnBnWHyRQHSM https://www.mouser.ca/datasheet/2/281/c02e-1068346.pdf
81-GCM155R71E103KA7D	Capacitor	RF	C9	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0.01uF 25Volts X7R 10%		1 0.1	152 https://www.mouser.ca/ProductDetail/Murata-Electronics/GCM155R71E103KA37D?qs=s()	https://www.mouser.ca/datasheet/2/281/murata_03122018_GCM_Series-1310150.pdf
1276-6524-2-ND	Capacitor	RF	C10	CAP CER 1UF 16V X7R 0603		1 0.008	819 https://www.digikey.ca/product-detail/en/samsung-electro-mechanics/CL10B105MO8NNV	http://www.samsungsem.com/kr/support/product-search/mlcc/_icsFiles/afleidfile/2018/07/04/CL10B105M08NNWC.pdf
SY632T-ND	Battery	Battery	B1	BATTERY ALKALINE 1.5V D		3 3	.82 https://www.digikey.ca/product-detail/en/fdk-america-inc-a-member-of-fujitsu-group/LR20-	https://media.digikey.com/pdf/Data%20Sheets/FDK/LR20F.pdf
2N7002K-7DITR-ND	MOSFET	Battery	Q1	MOSFET N-CH 60V 0.38A SOT23-3		1 0.0	https://www.digikey.com/product-detail/en/diodes-incorporated/2N7002K-7/2N7002K-7DIT	https://www.diodes.com/assets/Datasheets/ds30896.pdf
XCL101A361ER-G-ND	Regulator	Battery	VR1	Non-Isolated PoL Module DC DC Converter 1 Output 3.6V 100mA 0.9V - 5.5V Input		1 1.682	243 https://www.digikey.ca/product-detail/en/torex-semiconductor-ltd/XCL101A361ER-G/XCL10	https://www.torexsemi.com/file/xcl101/XCL101.pdf
998-MIC5219-3.6YM5TR	Regulator ON BOAR	Battery	VR1	LDO Voltage Regulators		1 1	.27 https://www.mouser.ca/ProductDetail/Microchip-Technology-Micrel/MIC5219-36YM5-TR?	https://www.mouser.ca/datasheet/2/268/mic5219-1082354.pdf
732-5317-ND	Connector	USRF	J2	CONN HEADER 4 POS 2.54		1 0	.26 https://www.digikey.ca/product-detail/en/wurth-electronics-inc/61300411121/732-5317-ND	http://katalog.we-online.de/em/datasheet/6130xx11121.pdf
732-5315-ND	Connector	Battery	J3-J4	CONN HEADER 2 POS 2.54		2 0	.19 https://www.digikev.ca/product-detail/en/wurth-electronics-inc/61300211121/732-5315-ND/	4846823