

1.1 BOM – Bill Of Materials

Part name	Package	Quantity	Description	Supplier	Supplier part number
NRF52832-QFAA	QFN40P600X600X90-48N	1	Multi-protocol Bluetooth Low Energy and 2.4GHz proprietary system-on-chip	Nordic Semicon ductor	
74HC595	SOP16	3	Shift register	Digi-Key	568-2263-1-ND
SW-DPDT	JS202011SCQN	1	SMD slide Switch (ON-ON)	Digi-Key	401-2002-1-ND
SD103ATW-7-F	SOT-363	1	Surface Mount Schottky Barrier Diode Array	Digi-Key	SD103ATW-FDICT-ND
AP7333-33SAG-7	SOT-23	1	300mA, Low Quiescent Current, Fast Transient Low Dropout Linear Regulator	Digi-Key	AP7333-33SAG-7DICT-ND
LIS2DH12	LGA-12	1	Ultra-low-power highperformance three-axis linear accelerometer	Digi-Key	497-14851-1-ND
Samtec FTSH-105 Keying Shroud	FTSH-105-K	1	Debug In - Samtec - Conn Header 10pos dual .05" SMD Keying Shroud	Digi-Key	SAM8796-ND
2N7002	SOT-23	1	N-Channel Enhancement Mode Field Effect Transistor	Digi-Key	2N7002LT1GOSCT-ND
RESC1005X04L	0402	24	Chip Resistor, 2-Leads, Body 1.0x0.5mm, IPC High Density	Digi-Key	P390LCT-ND
XTAL_SMD2016_3 2MHz_8pF_Epson	BT-XTAL_2016	1	XTAL SMD 2016, 32MHz, Cl=8pF, Total Tol: ±40ppm	Farnell	171-2806
Capacitor	CAPC1005X04L	6	100nF - Capacitor, X7R, ±10%	Digi-Key	1276-1001-1-ND
Capacitor	CAPC1005X04L	2	12pF - Capacitor, NP0, ±2%	Digi-Key	712-1256-1-ND
Capacitor	CAPC1005X04L	1	100pF - Capacitor, NP0, ±5%	Digi-Key	709-1123-1-ND
Capacitor	CAPC1005X04L	1	1pF - Capacitor, NP0, ±0.1pF	Digi-Key	490-6073-1-ND
Capacitor	CAPC1005X04L	1	0,8pF - Capacitor, NP0, ±5%	Digi-Key	490-11253-1-ND
Capacitor	CAPC1608X06L	3	1uF - Capacitor, X7R, ±10%	Digi-Key	1276-1946-1-ND

Capacitor	CAPC1608X06L	1	10uF - Capacitor, NP0, $\pm 2\%$	Digi-Key	445-11185-1-ND
Capacitor - Nichicon UKL1C100KDD1TD	UKL1C100KDD1TD	1	Cap Alum 10uF 10% 16V Radial	Digi-Key	493-14344-1-ND
Capacitor	CAPC1608X06L	1	4,7uF - Capacitor, X5R, $\pm 10\%$	Digi-Key	1276-1045-1-ND
Inductor	INDC1608X06L	1	10uH - Chip inductor, IDC,min = 50 mA, $\pm 20\%$	Digi-Key	587-1714-1-ND
Inductor	INDC1005X04L	1	15nH - High frequency chip inductor $\pm 10\%$	Digi-Key	587-1521-1-ND
Inductor	INDC1005X04L	1	3,9nH - High frequency chip inductor $\pm 5\%$	Digi-Key	490-1131-1-ND
RGB LED		6	Lightdiode - Red, Green, Blue	RS	835-2891
Switch		6	SWITCH TACT SPST-NO 0.025A 50V	Digi-Key	EG1328-ND
Switch		1	SLIDE SWITCH DPDT GULLWING 6V	Digi-Key	CAS220GCT-ND
Battery		1			https://www.adafruit.com/products/328
Charge circuit		1			https://www.adafruit.com/product/259

Note: Some components, such as the rumble engine, or the microUSB-input and headers has been scavenged from other sources and is thus not included in this BOM.