

## RPX-100 Bill of Material

Item	Qty	Reference(s)	Value	Footprint	Distributor	Distributor No	Manufacturer
1	5	C1, C4, C6, C7, C10	1nF	C_0603_1608Metric	Mouser	80-C0603C102K4RECAUT	KEMET
2	2	C2, C3	100pF	C_0603_1608Metric	Mouser	80-C0603X101G1GAUTO	KEMET
3	1	C5	2.7pF	C_0603_1608Metric	Mouser	77-VJ0603D2R7BXPJAJ	Vishay / Vitramon
4	1	C8	15nF	C_0603_1608Metric	Mouser	77-VJ0603Y153JXAAC	Vishay / Vitramon
5	2	C9, C11	10nF	C_0603_1608Metric	Mouser	80-C0603C103KARAUTO	KEMET
6	1	C12	220uF	CP_Radial_D10.0mm_P5.00mm	Mouser	80-ESK227M350AQ4AA	KEMET
7	1	C13	1uF	C_0603_1608Metric	Mouser	581-06035D105KAT2A	Kyocera AVX
8	1	D1	8.2V Zener	D_DO-41_SOD81_P7.62mm_Horizontal	Mouser	512-1N4738A	onsemi
9	1	IC1	PSA-14+	SOT-343_SC-70-4_Handsoldering	Mouser	139-PSA-14+	Mini-Circuits
10	1	IC2	74LS244_Split	SOIC-20W_7.5x12.8mm_P1.27mm	Mouser	595-SN74LVCH244ADWR	Texas Instruments
11	1	IC3	VSW2-33-10W	JZ1436	Mouser	139-VSW2-33-10W	Mini-Circuits
12	8	T1, T2, T3, T4, T5, T6, T7, T8	BSS138	SOT-23	Mouser	771-BSS138P215	Nexperia
13	1	T11	MRFE6VS25NR1	TRANS_MRFE6VS25NR1	Mouser	841-MRFE6VS25NR1	NXP Semiconductors
14	1	J1	TX-SDR	SMA_AmphenoL_132291_Vertical	Mouser	571-5-1814832-2	TE Connectivity
15	1	J2	RX-SDR	SMA_AmphenoL_132291_Vertical	Mouser	571-5-1814832-2	TE Connectivity
16	1	J3	GPIO CM4	PinHeader_2x20_P2.54mm_Vertical	Mouser	649-68000-220HLF	TE Connectivity
17	1	J4	GPIO SDR	PinHeader_2x05_P2.54mm_Vertical	RS-Components	832-3528	10WAY
18	1	J5	GPIO EXT Read	PinHeader_1x04_P2.54mm_Vertical	RS-Components	543-7738	TE Connectivity
19	1	J6	GPIO EXT R/W	PinHeader_1x04_P2.54mm_Vertical	RS-Components	543-7738	TE Connectivity
20	1	J7	Power	PinHeader_1x04_P2.54mm_Vertical	RS-Components	543-7738	TE Connectivity
21	1	J8	ANT	SMA_AmphenoL_132291_Vertical	Mouser	571-5-1814832-2	TE Connectivity
22	1	K1	TX2SA-5V	TX2SA-LT	Mouser	769-TX2SA-5V	Pamasonic
23	1	L1	2.7uH	L_0603_1608Metric	Mouser	70-ILSB0603ER2R7K	Vishay / Dale
24	1	L2	47nH	L_0603_1608Metric	Mouser	871-B82496C3470G000	TE Connectivity
25	1	L3	4 turns	AWG 20, 0.89mm Copper			
26	1	LED1, LED2, LED3, LED4	GPIO1	LED_0603_1608Metric	Mouser	710-155060GS75300	Würth Elektronik
27	1	LED5	TX LED	LED_0603_1608Metric	Mouser	710-155060RS75300	Würth Elektronik
28	1	LED6	RX LED	LED_0603_1608Metric	Mouser	710-155060YS75300	Würth Elektronik
29	6	R1, R6, R11, R16, R24, R25	1k Ohm	R_0603_1608Metric	Mouser	71-CRCW06031K00JNECC	Vishay / Dale
30	16	R2, R3, R4, R5, R7, R8, R9, R10, R12, R13, R14, R15, R17, R18, R19, R20	10k Ohm	R_0603_1608Metric	Mouser	71-CRCW060310K0JNEAC	Vishay / Dale
31	1	R21	5k Potentiometer	Potentiometer_Bourns_3224W_Vertical	Mouser	652-3223W-1-502	Bourns
32	1	R22	15 Ohm	R_0603_1608Metric	Mouser	71-CRCW060315R0FKEAC	Vishay / Dale
33	1	R23	5.6k Ohm	R_0603_1608Metric	Mouser	71-CRCW06035K60JNEAC	Vishay / Dale
34	1	E1	Ferrite Cable Cores 43 SHIELD BEAD Z=131 OHM @100MHz		Mouser	623-2643021801	Fair-Rite
35	1	E2, E3	Ferrite Rings 67 MULTI-APERTURE 13.3mm 6.6mm 7.5mm		Mouser	623-2867001502	Fair-Rite