Item #	*Ref Des	*Qty	Manufacturer
1	U1	1	TonTek
2	U2,U3	2	Nexperia
3	U4	1	Nexperia
4	U5	1	Nexperia
5	U6	1	Microchip Technology
6	U7, U12	2	Microchip Technology
7	U8	1	Microchip Technology
8	U9	1	Microchip Technology
9	U10	1	ETC
10	U11	1	Texas Instruments
11	D1,D2	2	Infineon Technologies
12	D3	1	Wurth Elektronik
13	X1	1	any
14	X2	1	any
15	X3	1	any
16	L1,L2	2	Bourns
17	C1,C2,C3,C9,C10,C7,C8	7	any
18	C5,C12	2	any
19	C22,C38	2	any
20	C6,C13,C20,C21,C23, C24,C25,C26,C27,C28,C30,C32,C3 3,C35	14	any
21	C29,C36,C37	3	r
22	C14	1	any
23	C11	1	any
24	C4	0	any
25	C15,C16,C17,C18,C19,C31,C34	7	any
26	R1,R5,R11,R13	4	any
27	R12,R14,R18,R19	4	any
28	R17	1	any
29	R3,R4,R7,R8,R15,R16	6	any
30	R2,R6,R9,R10,R20,R21,R22	7	any
31	Y3, Y7	2	CUI Devices
32	P1,P2,P3,P4	4	Amphenol Piher
33	J1	1	Amphenol Commercial Products
34	Y1, Y2	2	PEM

OpenTheremin V4.1 BOM (Bill of Materials)

*Mfg Part #	Description / Value
TTP223E-BA6	TonTouch, key touch pad detector IC
74HC4060D	14-STG RC BINARY COUNTER
74HC74D	Flip-Flops DUAL D-TYPE POSITIVE EDGE-TRIG
HEF4069UBT	HEX INVERTER
MCP4921T-E/SN	DAC Sgl 12-bit SPI int
MCP4922T-E/SL	DAC Dual 12-bit SPI int
MCP6002T-I/SN	OpAmp Dual 1.8V 1MHz
ATMEGA328P-AU	8-bit Microcontrollers - MCU 32KB, 20MHz 1.8V-5.5V
CH340G	USB to serial chip
LP2985-33DBV	LDO Voltage Regulators 3.3V, 150-mA Low-Noise
	Varactor Diodes 50mA Silicn
BB 914 E6327	Variable Capacitance Diode
156125RB73000	Reverse SMD BiColor LED Blue / Red, WL-SBRW
Crystals 16.000MHz +/-30ppm 18pF	Crystals
Crystals 7.37280MHz +/-30ppm 18pF	Crystals
Crystals 12.000MHz +/-30ppm 18pF	Crystals
CC453232A-102KL	Coil, 1mH UH 10%, 40 Ohms
150pF 50V NPO 5%	Capacitor
470pF 50V NPO 5%	Capacitor
10nF 16 V X7R 5%	Capacitor
100nF 25V X7R 10%	Capacitor
10uF 6.3V X5R 10%	Capacitor
47pF 50V NPO 5%	Capacitor
10pF 50V NPO 5%	Capacitor
NOT ASSEMBLED	
22pF 16 V X7R 5%	Capacitor
4.7M OHM 1%	Resistor
470 OHM 1%	Resistor
10K OHM 1%	Resistor
100K OHM 1%	Resistor
2.2k OHM 1%	Resistor
SJ-3524-SMT-TR	Phone Connectors Audio Jacks, 3.5mm SMD
PS15NV60-103A3030-PM	SMD POT 10K OHM LINEAR
12401610E4#2A	USB_C_Receptacle_Amphenol_12401610E4-2A
SMTSOB-M3-2ET	BRASS SMT STANDOFF M3 L:2MM

23/08/21

SOT-23-6 SMD SOIC-16_N SMD SOIC-14_N SMD SOIC-14_N SMD SOIC-08_N SMD SOIC-14_N SMD SOIC-18_N SMD CUSTOMER SUPPLIED PART SOIC-08_N SMD TQFP-32_7x7mm_P0.8mm SMD SOIC-16_3.9x9.9mm_P1.27mm SMD SOT-23-5 SMD SOT-23 SMD SMD Crystal_HC49-SD_SMD SMD 13.4 x 4.9 x 4.3mm SMD Crystal_HC49-SD_SMD SMD 13.4 x 4.9 x 4.3mm SMD COIL SMD 603 SMD	*Package	Туре	Your Instructions / Notes
SOIC-14 N	SOT-23-6	SMD	
SOIC-14_N SMD SOIC-08_N SMD SOIC-14_N SMD CUSTOMER SUPPLIED PART SOIC-08_N SMD TQFP-32_7x7mm_P0.8mm SMD SOIC-16_3.9x9.9mm_P1.27mm SMD SOT-23-5 SMD SOT-23-5 SMD SOT-23 SMD Crystal_HC49-SD_SMD SMD 13.4 x 4.9 x 4.3mm SMD Crystal_HC49-SD_SMD SMD 13.4 x 4.9 x 4.3mm SMD COIL SMD 603	SOIC-16_N	SMD	
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SOT-23	SOIC-16 3.9x9.9mm P1.27mm	SMD	
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603 SMD 603 SMD 603 SMD 603 SMD PLUG3_5_SMD SMD SMD POT SMD USB_C_Receptacle SMD	603	SMD	MUST BE C0G (NP0)
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PLUG3_5_SMD SMD SMD POT SMD USB_C_Receptacle SMD			
SMD POT SMD USB_C_Receptacle SMD			
USB_C_Receptacle SMD			
	Hardware	SMD	