

## ItsyBitsy M0 Synth / Sigma-6 Voice Module – Parts List

Description	Designator(s)	Qty
Circuit board (bare PCB) – see website		1
Enclosure, plastic, 130 x 55 x 40 mm (min.) <i>or...</i> Eurorack panel, 128.5 x 50.5 mm (3U x 10HP)		1
MCU module, Adafruit 'ItsyBitsy M0 Express' <i>or...</i> RobotDyn 'SAMD21 M0-Mini' (see website)	A1	1
OLED Display, 1.3 inch, IIC, SH1106, 4-pin (pinout: <b>1=VDD</b> , <b>2=GND</b> , 3=SCL, 4=SDA)		1
PCB strip header, 14-way SIL 0.1", female ccts	(A1 socket)	2
PCB strip header, 4-way SIL, 0.1", female ccts (option)	P3 (OLED)	(1)
PCB pin header, 5-way SIL, 0.1" (with plug)	P5 (MIDI IN)	1
PCB pin header, 2-way SIL, 0.1" (with plug)	JP1, P1, P6 (+ A1 skt)	4
PCB pin header, 6-way SIL, 0.1" (with plug)	P7 (optional)	(1)
DIP-switch, 4-way, DIP-8	S1, S2, S3, S4	1
Jack-socket, 3.5mm TS mono, PJ301F (alt. PJ301M)	J1, J2, ... J6	6
IC socket, DIL-8	(U1, U2, ...U5, V1)	5
Tact push-button switch, 6x6mm, 11mm shaft	buttons 'A' and 'B'	2
Socket, DIN, 5-pin 180°, panel mount (optional)	MIDI-IN (off-board)	(1)
IC, D/A converter, SPI, MCP4921, DIP-8	U1	1
IC, dual op-amp, LM2904 (alt. LM358), DIP-8	U2, U3	2
IC, timer/switch, NE555 (alt. LM555), DIP-8	U4	1
IC, EEPROM (1kB), 24LC08B, DIP-8 (optional)	U5	(1)
IC, opto-coupler, 6N138, DIP-8 (optional)	V1	(1)
Potentiometer, rotary, PCB mount B-10k (linear)	RV1 (data entry pot)	1
Diode, 1N914 (1N4148), small-signal	D1, D2	2
Capacitor, Electrolytic, 22µF 16V	C2	1
Capacitor, Polymer, 10nF 50V (prefer MKT)	C3	1
Capacitor, Monolithic ceramic, 100nF (.1 µF) 50V	C1, C4	2
Resistor, 220, 1/8W ~ ¼W, 1% (2%) metal film	R2	1
Resistor, 470, 1/8W ~ ¼W, 1% (2%) metal film	R1 (alt.)	1
Resistor, 2k2, 1/8W ~ ¼W, 1% (2%) metal film	(R1), R3, R4, R6, R7, R16	6
Resistor, 10k, 1/8W ~ ¼W, 1% (2%) metal film	R5, R17	2
Resistor, 18k, 1/8W ~ ¼W, 1% (2%) metal film	R8, R10, R12, R14	4
Resistor, 33k, 1/8W ~ ¼W, 1% (2%) metal film	R9, R11, R13, R15	4
Resistor, 47k, 1/8W ~ ¼W, 1% (2%) metal film	R5, R18	2
Hookup wire, stranded 13 x 0.12mm, ass'd colours		
Hardware – screws, nuts, washers, standoffs, etc		