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.) *or*... Eurorack panel, 128.5 x 50.5 mm (3U x 10HP)		1
MCU module, Adafruit 'ItsyBitsy M0 Express' *or*... RobotDyn 'SAMD21 M0-Mini' (see website)	A1	1
OLED Display, 1.3 inch, IIC, SH1106, 4-pin (pinout: 1=VDD, 2=GND, 3=SCL, 4=SDA)	H1	1
PCB strip header, 14-way SIL 0.1", female ccts	A1 socket	2
PCB strip header, 2-way SIL 0.1", female ccts	A1 socket	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)	P1, P6	2
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 (Qty=3 if no CV inputs)	U1, U2, ...U5, V1	3/6
Tact push-button switch, 6x6mm, 8mm shaft	buttons 'A' and 'B'	2
Socket, DIN, 5-pin 180°, panel mount	MIDI-IN	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 (see website)	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, 1k0, 1/8W ~ ¼W, 1% (2%) metal film	R1	1
Resistor, 2k2, 1/8W ~ ¼W, 1% (2%) metal film	R3, R4, R6, R7, R16	5
Resistor, 10k, 1/8W ~ ¼W, 1% (2%) metal film	R5, R17, R19	3
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		

[Components listed in shaded text are required only for module variants with CV inputs.]