clumsyMIDI – Bill of Materials

Total Component Count: 23

Reference	Qnty	Value	Footprint	Description
A1,	1	GY-PCM5102	Custom	GY-PCM5102 DAC board (cheaply available on eBay/AliExpress)
A2,	1	SSD1306 Header	Custom	0.91" SSD1306 OLED board, use 5V compatible boards with 3.3V regulator (usually marked Q1 or U1) on the back of the board (cheaply available on eBay/AliExpress)
C1,	1	470u 10V	THT Electrolytic Cap Radial D8.0mm, 3.5mm pitch	Electrolytic capacitor, preferably low ESR
C2, C3, C4, C6,	4	100n	THT Unpolarized Capacitor, Rectangular 7.0mm x 2.0mm, 5.00mm pitch	Unpolarized bypass capacitors, use either X7R or film (e.g. WIMA MKS2)
C5,	1	100u	THT Electrolytic Cap Radial D6.3mm, 2.5mm pitch	Electrolytic capacitor
D1,	1	1N4148	DO-35	Fast Switching Diode
J2, J3,	2	MIDI In & Out Jacks	DIN 5 Pin Jack (Universal)	5-pin DIN socket, (hopefully) with universal footprint for most types
J4,	1	MIDI Thru Jack	Pin Header 1x05 2.54mm Pitch	5-pin DIN connector (Pin Header only)
P1,	1	Conn_02x20_Odd_Even	Raspberry PI GPIO Socket	Generic connector, double row, 02x20, odd/even pin numbering scheme (row 1 odd numbers, row 2 even numbers)
R1, R2, R4, R5, R6,	5	220Ω	THT Resistor DIN0207 (L6.3mm x D2.5mm, 7.62mm pitch)	Resistor
R3,	1	1kΩ	THT Resistor DIN0207 (L6.3mm x D2.5mm, 7.62mm pitch)	Resistor
U1,	1	74HCT14	DIP-14 W7.62mm	Hex inverter schmitt trigger
U2,	1	H11L1M	DIP-6 W7.62mm	Schmitt Trigger Output Optocoupler, High Speed, DIP-6, 1.6mA turn on threshold
S1,	1	DIP-14 socket	DIP-14 W7.62mm	Optional socket for U1
S2,	1	DIP-6 socket	DIP-6 W7.62mm	Optional socket for U2

Mechanical Parts: 4x M2.5 nut, 4x M2.5x11+6 standoff, 4x M2.5x5+6 standoff