

MIDIMUSO 1007 MIDI TO CV KOSMO BOM

Designator	Package	Quantity	Designation	Supplier and ref
U2	TO-92 Inline_Wide	1	TL431	rapidonline.com/texas-instruments-ti431cip-precision-regulator-82-0298
J25,J27,J29	8 Pin Headers Male for connecting boards	3	MAIN A,MAIN B, MAIN C	https://www.ebay.co.uk/itm/Female-Male-Header-Pins-Strip-0-1-2-54mm-for-Breadboard-PCB-DuPont-arduino-pi/36294
J1	Multicomp_MC9A12-1034_2x05_P2.54mm_Vertical	1	Eurorack STYLE POWER	https://www.rapidonline.com/truconnect-10-way-ipc-straight-boxed-header-2-54mm-pitch-19-0033
C2,C1,C3	CP_Radial_D6.3mm_P2.50mm	3	10uf	https://www.rapidonline.com/forever-10uf-20-35v-105-c-p-2mm-radial-electrolytic-capacitor-11-1220
C5,C14,C15,C16,C17,C24,C25,C28	Ceramic Capacitor	8	100nf	https://www.rapidonline.com/suntan-ts170r1h104msbfa0r-0-1uf-20-50v-y5v-p-2-54mm-radial-ceramic-capacitor-11-345
C6,C7	Ceramic Capacitor	2	22pf	https://www.rapidonline.com/suntan-ts15001h220ksbna0r-22pf-10-50v-np0-2-5mm-ceramic-disc-capacitor-08-0046
C8,C9,C10,C11,C12,C13,C18,C19,C20,C21,C22,C23	Ceramic Capacitor	12	10nf	https://www.rapidonline.com/suntan-ts15001h103zsbva0r-10nf-20-80-50v-2-5mm-z5v-ceramic-disc-capacitor-08-0232
C4	TANTALUM CAPACITOR 1uf	1	1uf TANTALUM	https://www.rapidonline.com/suntan-ts19001v010msb0b0r-1uf-35v-5-08mm-tantalum-bead-capacitor-11-0688
D1	Signal Diode	1	1N4148	https://www.rapidonline.com/dc-components-1n4148-pack-of-5000-signal-diode-75v-47-3415
J2,J4,J5	Molex 3 pin male	3	MIDI THRU, IN	https://www.rapidonline.com/jyk-p2500-03-3-pole-straight-header-22-0955
J3, J6	Molex 2 pin male	2	CHAIN IN/OUT	https://www.rapidonline.com/jyk-p2500-02-2-pole-straight-header-22-0950
	Molex 2 pin Female	1	CHAIN IN	https://www.rapidonline.com/jyk-h2500-02-2-pole-crimp-housing-22-0905
R2,R3	Metal Film Resistor 1/4Watt	2	10R	https://www.ebay.co.uk/itm/1-4W-Metal-Film-Resistors-1-Values-1ohm-to-10Mohm-12-25-50-100/321411096993?_trkp
R4	Metal Film Resistor 1/4Watt	1	5k1	
R6,R20,R21,R23,R24,R44	Metal Film Resistor 1/4Watt	6	220r	
R7,R8,R9,R10,R11,R12,R13,R14,R15,R16,R17,R18	Metal Film Resistor 1/4Watt	12	100k	
R19,R5	Metal Film Resistor 1/4Watt	2	10k	
R1,R22,R27	Metal Film Resistor 1/4Watt	1	1k	
R26	Metal Film Resistor 1/4Watt	1	270r	
U1	28 pin IC (plus 28 pin IC socket or 2 14 Pin IC sockets)	1	MIDIMUSO CHIP INCLUDED WITH KIT	
U4,U5	IC 16 pin (plus 16 pin IC socket)	2	TI4504 (ignore MI14504) INCLUDED WITH KIT	
U6	Opto Coupler (and 8 pin ic socket)	1	6N137	https://www.ebay.co.uk/itm/6N137-VERY-HIGH-SPEED-LOGIC-GATE-Optocoupler-Electronic-Component/37115457760
U7,U8,U9	TL074 Quad Opamp (and 14 pin ic socket)	3	TL074	https://www.rapidonline.com/Catalogue/Search?Query=tl074&Size=20
U10	14 Pin IC (and 14 pin ic socket)	1	74LS14	https://www.ebay.co.uk/itm/FAIRCHILD-DM74LS14N-HEX-INVERTER-WITH-SCHMITT-TRIGGER-14PIN-QTY-1/1140945
Y1	Crystal_HC18-U_Vertical	1	16Mhz	https://www.rapidonline.com/16mhz-20ppm-hc49s-ael-low-profile-crystal-90-2378
U3	TO-92 Inline_Wide 78L05	1	L78L05_TO92	https://www.rapidonline.com/trusemi-da78l05-voltage-regulator-5v-100ma-to92-47-3612
RV1	Potentiometer_Bourns_Trimpot	1	5K Trim	https://www.rapidonline.com/suntan-tsr-3296w-502r-5k-wr3296w-10-3-8-cermet-trimmer-pot-68-1945
RV2	Potentiometer_Bourns_Trimpot	1	10K Trim	https://www.rapidonline.com/suntan-tsr-3296w-103r-10k-wr3296w-10-3-8-cermet-trimmer-pot-68-1946
M3 Standoffs would be good to hold in like linked 4 m3 bolts and nuts	10mm (not like pictured in the link but they are the right ones)	4		https://www.rapidonline.com/pb-fastener-s45530x10-zinc-plated-steel-m-f-spacers-m3-x-10mm-pack-of-10-49-0932
				https://www.rapidonline.com/affix-stainless-steel-nuts-m3-pack-of-100-33-4305
Yes they are packs of 100, but you'll end up using them!				https://www.rapidonline.com/affix-pozil-pan-head-machine-screws-bzp-m3-6mm-pack-of-100-33-2300
Please note the above is only for the back board. Below is for the control board				
J30,J28,J26	8 Pin Headers Female for connecting boards	3	DAUGHTER A,B,C	https://www.ebay.co.uk/itm/Female-Male-Header-Pins-Strip-0-1-2-54mm-for-Breadboard-PCB-DuPont-arduino-pi/36294
Q1	2n3904 TRANSISTOR	1	2n3904	https://www.rapidonline.com/trusemi-2n3904-transistor-npn-to92-60v-81-0484
J7,J8,J9,J10,J11,J12,J13,J14,J15... up to J30	BIG JACK SOCKETS	18		https://www.rapidonline.com/truconnect-3-pole-box-style-jack-socket-20-1397
D2,D3,D4,D7,D8,D11,D12	5mm LED's	7		https://www.rapidonline.com/kingbright-l-7113src-dv-5mm-super-bright-red-led-1600mcd-55-0131
R25,R28,R29,R35,R40,R41,R52	Metal Film Resistor 1/4Watt	7	1k	https://www.ebay.co.uk/itm/1-4W-Metal-Film-Resistors-1-Values-1ohm-to-10Mohm-12-25-50-100/321411096993?_trkp
R30,R31,R36,R37,R42,R43,R32,R33,R34,R38,R39,R45,R46,R47,R48,R49,R50,R51	Metal Film Resistor 1/4Watt	18	100r	
U11	TL074 Quad Opamp (and 14 pin ic socket)	1	TL074	https://www.rapidonline.com/Catalogue/Search?Query=tl074&Size=20
U12	TL072 Dual Opamp (and 8 pin ic socket)	1	TL072	https://www.rapidonline.com/Catalogue/Search?Query=tl072
C27,C29	100nf Ceramic Capacitor	2	100nf	https://www.rapidonline.com/suntan-ts170r1h104msbfa0r-0-1uf-20-50v-y5v-p-2-54mm-radial-ceramic-capacitor-11-345
MIDI SOCKETS		3		https://www.rapidonline.com/truconnect-5-pin-180-dln-chassis-socket-20-0255
Use the M3 bolts you bought above to screw in the midi sockets :)				
You'll need some wire to connect the midi sockets to the molex connectors				
Molex 3 pin female to attach too above J2,J4,J5, Check orientation on images.				
https://www.rapidonline.com/jyk-h2500-03-3-pole-crimp-housing-22-0910				
You probably have the metal bits that go in the molex connectors from previous builds but below is the link anyway				
https://www.rapidonline.com/jyk-t2500-02-reel-1000-0-1-crimp-terminals-22-1098				