

Resistors:

QTY	Value	Ref.	Mouser Part #
1	150Ω	R1	291-150-RC
1	499Ω 1%	R4	MFR-25FRF52-499R
1	1kΩ	R7	291-1k-RC
3	4.7kΩ	R2, R8, R9	291-4.7k-RC
1	10kΩ	R3	291-10k-RC
2	100kΩ	R5, R6	291-100k-RC

TOTAL: 9

Resistor Arrays:

QTY	Value	Ref.	Mouser Part #
1	1kΩ	R12	269-1.0K-RC
2	100kΩ	R10, R11	269-100K-RC

TOTAL: 3

Diodes:

QTY	Value	Ref.	Mouser Part #
4	1N4148	D1, D2, D3, D4	512-1N4148
1	RGB LED	D1*	604-WP154A4SUREQBFZW

TOTAL: 5

Capacitors:

QTY	Value	Ref.	Mouser Part #
2	15pF Ceramic	C11, C12	581-SR155A150JARTR2
5	47pF Ceramic	C15, C16, C17, C18, C19	810-FG18C0G1H470JNT6
4	47nF Ceramic	C4, C7, C8, C9	75-1C10Z5U473M050B
7	.1μF Ceramic	C1, C2, C3, C5, C6, C10, C13	80-C316C104M5UCA7301
1	10μF Electrolytic	C14	647-USA1C100MDD

TOTAL: 19

Voltage Regulators:

QTY	Value	Ref.	Mouser Part #
1	TL431	U1	511-TL431CZ
1	LM78L05ACP	VR1	512-MC78L05ACP

TOTAL: 2

Integrated Circuits:

QTY	Value	Ref.	Mouser Part #
1	TL072	U2	595-TL072IPE4
1	CD74HC4016E	U3	595-CD74HC4016E
1	PIC18F2553	U4	579-PIC18F2553-I/SP
1	TL074	U5	595-TL074CN
1	MCP4922	U6	579-MCP4922-E/P

TOTAL: 5

* Denotes part is on front panel PCB

MST Midi to CV Expander BOM

Updated: 07/19/2016

Potentiometers:

QTY	Value	Ref.	Mouser Part #
1	1kΩ Linear Trimmer	R1*	652-3306F-1-102

TOTAL: 1

Jacks/Switches:

QTY	Value	Ref.	Mouser Part #
1	4 pos. DIP switch	S1	506-ADP0404
5	3.5mm Vertical In-line Jack	J1*, J2*, J3*, J4*, J5*	PJ301M from Synthrotek, various suppliers
1	SPST White Pushbutton	S1*	612-PS1024ARED
1	SPDT Center off sub mini toggle switch	S2*	611-T101-031

TOTAL: 8

Connectors:

QTY	Value	Ref.	Mouser Part #
1	8 pin (2x4) Right Angle Header	P1, P1*	571-1864794
1	6 pin (2x3) Right Angle Header	P2, P2*	571-1864794 (break to fit)
2	I2C Header	P3, P4	538-70553-0038
1	10 pin (2x5) Right Angle Header	P5	649-68021-410

TOTAL: 5

Other:

QTY	Value	Ref.	Mouser Part #
1	20MHZ Crystal	X1	815-ABL-20-B2
2	2.5mm Screws	N/A	N/A
2	3mm Screws	N/A	N/A
1	10 to 16 pin power cable	N/A	N/A
1	I2C Cable	N/A	N/A
1	PCB/Panel Set	N/A	N/A

TOTAL: 8

* Denotes part is on front panel PCB