MIDI to CV Converter

Built Feb 25, 2012

1N4148 D1 +5V

10K R1

0.1uF C1

0V

SV1

4 GND
3 PGD
2 PGC
1 VPP

PROGRAM

0V

IC1

1 MCLR/VPP
2 RA0/AN0
3 RA1/AN1
4 RA2/AN2/VREF-/CAP1/INDX
5 RA3/AN3/VREF+/CAP2/QEA
6 RA4/AN4/CAP3/QEB
7 AVDD
8 AVSS
9 OSC1/CLKI/RA7
10 OSC2/CLKO/RA6
11 RC0/T1OSO/T1CKI
12 RC1/T1OSI/CCP2/FLTA
13 RC2/CCP1
14 RC3/T0CI/T5CKI/INT0

28 RB7/KBI3/PGD
27 RB6/KBI2/PGC
26 RB5/KBI1/PWM4/PGM
25 RB4/KBI0/PWM5
24 RB3/PWM3
23 RB2/PWM2
22 RB1/PWM1
21 RB0/PWM0
20 VDD
19 VSS
18 RC7/RX/DT/SDO
17 RC6/TX/CK/SS
16 RC5/INT2/SCK/SCL
15 RC4/INT1/SDI/SDA

PIC18F2431DIP

+5V

0.1uF C2

15pF C3
Q1 20MHz
15pF C4

0V

0V

+12V 4

-12V 11

R4 390
TL084P
2
3
1
IC2A
4.7uF C6
0V

CV MOD OUT
J1
0V

R5 390
TL084P
6
5
7
IC2B
4.7uF C7
0V

CV VEL OUT
J2
0V

+5V

0.1uF C5

0V

R6 390
TL084P
9
10
8
IC2C
4.7uF C8
0V

CV PITCH OUT
J3
0V

R7 390
TL084P
13
12
14
IC2D
4.7uF C9
0V

CV GATE OUT
J4
0V

MIDI-IN MAB5SH

PE

220 R3

D2 1N4148

OK1

2
3
8
7
6
5

6N137

+5V

R2 360

0V