μP #1

- Set defaults

- Wait for input from keyboard

- Store 24 bits of streaming MIDI data into buffers: HighData, MidData, and LowData

- Does Low Data = DT (Did you depress the key?)

  Yes

  - Gate Voltage OFF

  No

  - Gate Voltage ON

- Does High Data or MidData = 0x0F? (Are you receiving a "bounce" from hitting the key very hard?)

  Yes

  - Output Control Voltage for 2nd Octave C#

  No

- Does MidData = (code for 2nd octave C#)?

  Yes

  - Output Control Voltage for 2nd Octave C#

  No

- Repeat this pattern for all 48 separate binary note codes in MidData
µP #2-3

- Set defaults
- Receive period information from A/D

Are switches set for Sine Wave?

Yes
- Send Sine Wave code to DAC

No

Are switches set for Square Wave?

Yes
- Send Square Wave code to DAC

No

Are switches set for Triangle Wave?

Yes
- Send Triangle Wave code to DAC

No