

MIDI finger drumpads w/ Arduino Pro Micro

- Circuit with 2 velostat pads running in parallel, able to take 2 readings on Arduino
 - Draw schematic
 - Test schematic
 - (photo of schematic)
 - Test cases:
 - Push V1, read on A0
 - Push V2 read on A1
 - Push V1 and V2 read on A0 and A1
- Form factor for velostat (size seems to have implications on resistance)
- Software to register hits
- Software to transform hit velocity into MIDI drum sound
- Use DAW to read MIDI sound into actual audio

1. *Get single pad working on Uno*
2. *Get double pads working on Uno*
 - a. *It's working when we can do velocity reading on both pads*
3. *Transfer schematic to Pro Micros*
4. *Generate MIDI signal with velocity sensitivity*
5. *Fine tuning*
 - a. *Form factor*
 - i. *Wood instead of paper?*
 - ii. *Veneer on top of velostat?*
 - b. *Velostat size*
 - c. *Resistor values*
 - d. *Software calibration*
 - i. *1600 MAX_RESISTANCE_OHMS seems good for finger touch, 3000 for "Micah's USB stick" touch*
 1. $V_{in} = 5V$
 2. $R1 = 1K\Omega$
 3. $Velo1: 2\frac{3}{8}" \times 2\frac{1}{8}"$
 4. $Velo2: 2\frac{3}{8}" \times 2"$