
DIY Macro-Pad Series

— Pitt Makerspace Workshop —

PCB Design & Manufacture

Cases, Keys, and Caps

Soldering and Software



PCB Design Considerations



Traces, Layers, Holes



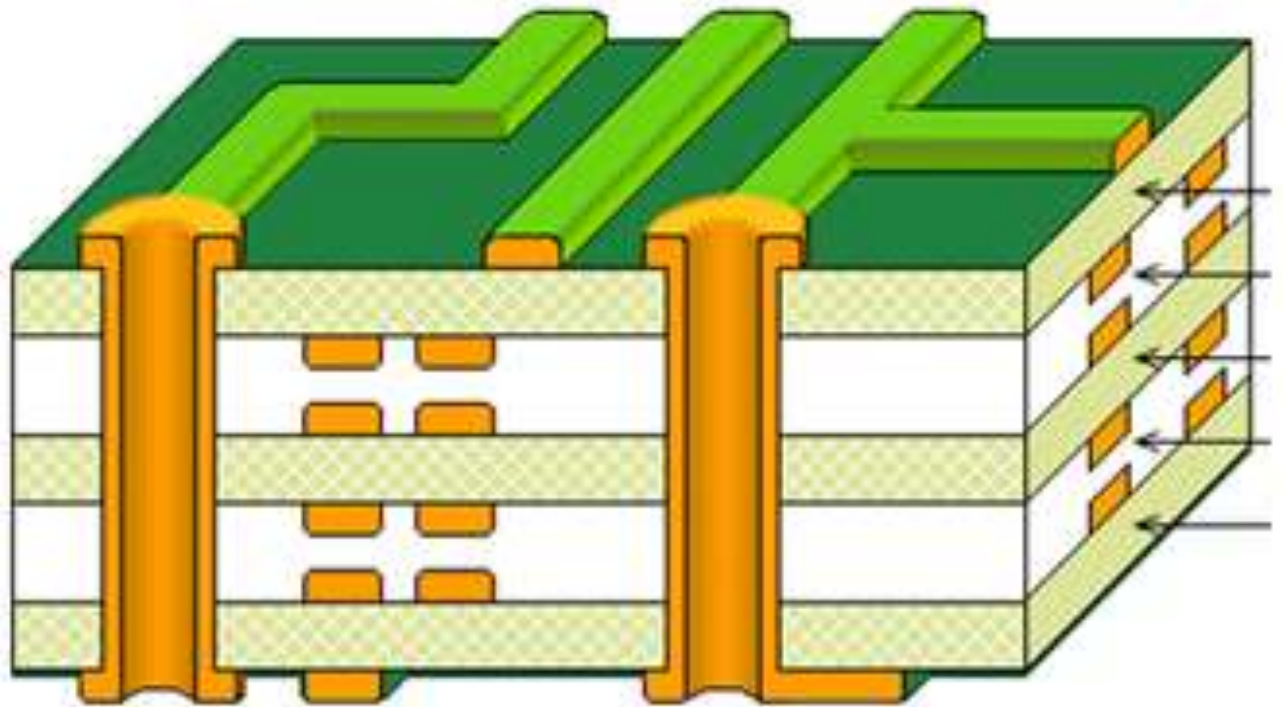
Footprints



Assembly

PCB Design Considerations

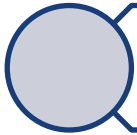
- Traces, Layers, Holes
- Footprints
- Assembly



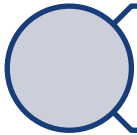
PCB Design Considerations



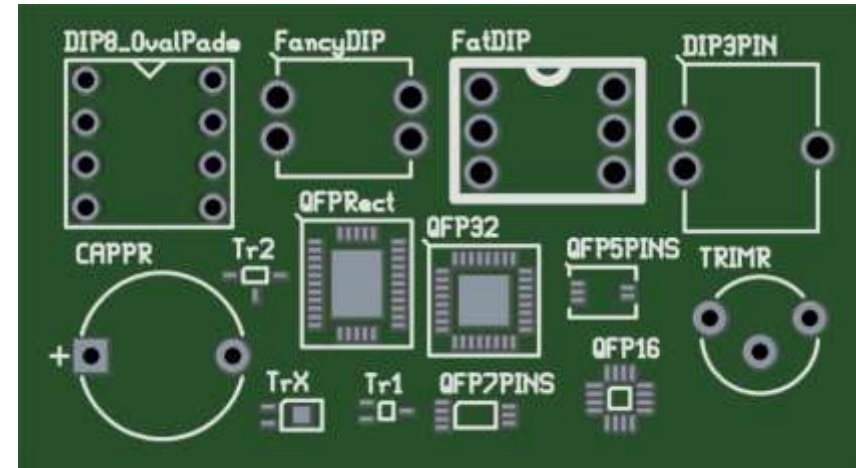
Traces, Layers, Holes



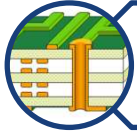
Footprints



Assembly



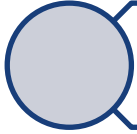
PCB Design Considerations



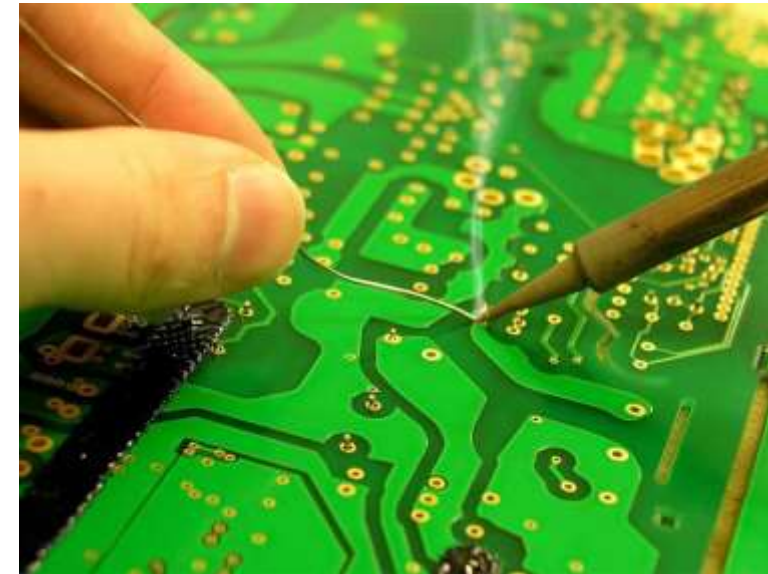
Traces, Layers, Holes



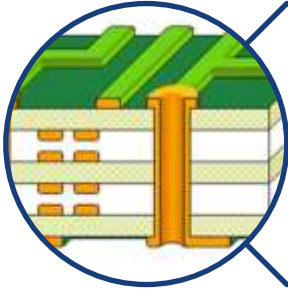
Footprints



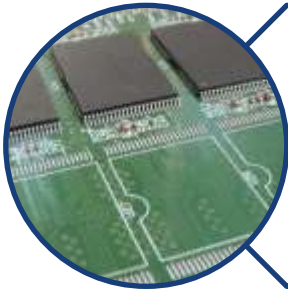
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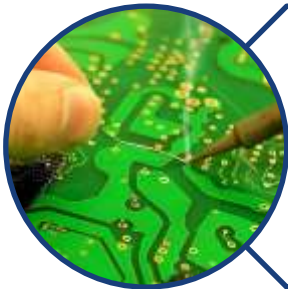
PCB Design Considerations



Traces, Layers, Holes

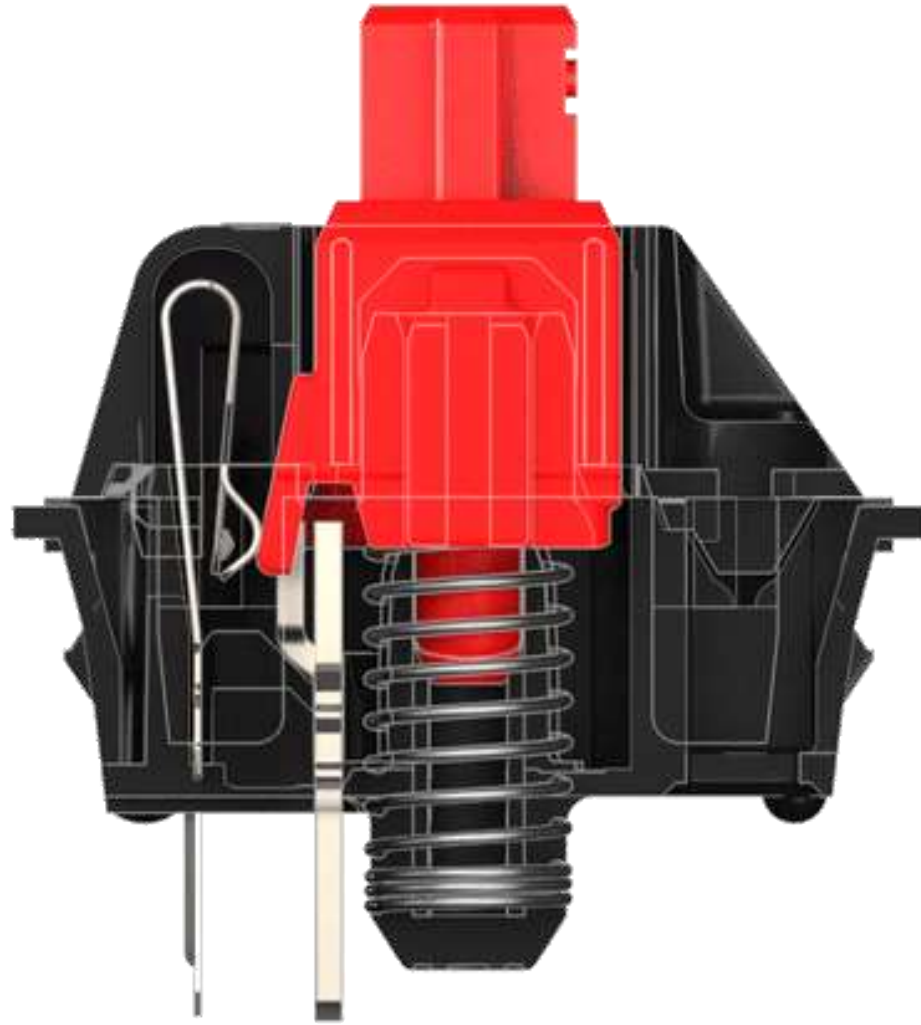


Footprints

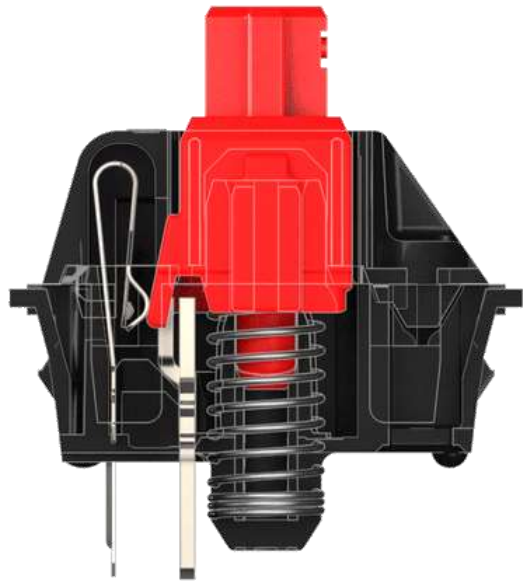


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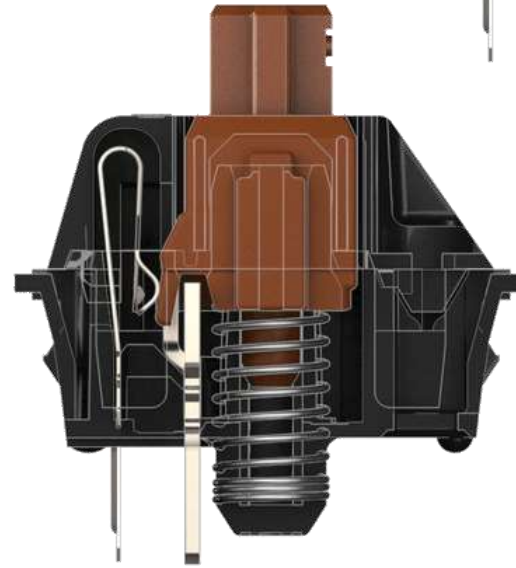
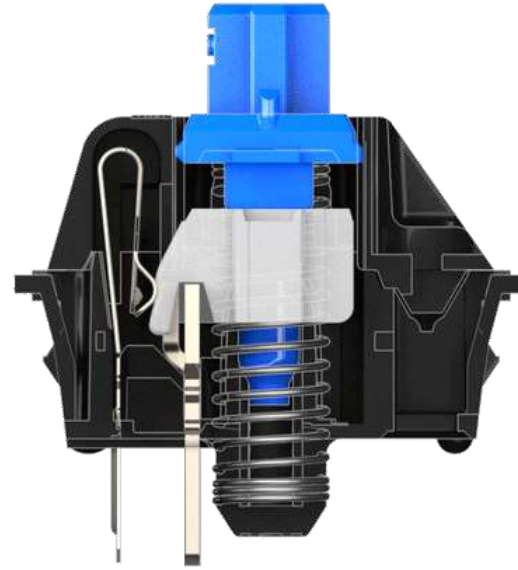
Components



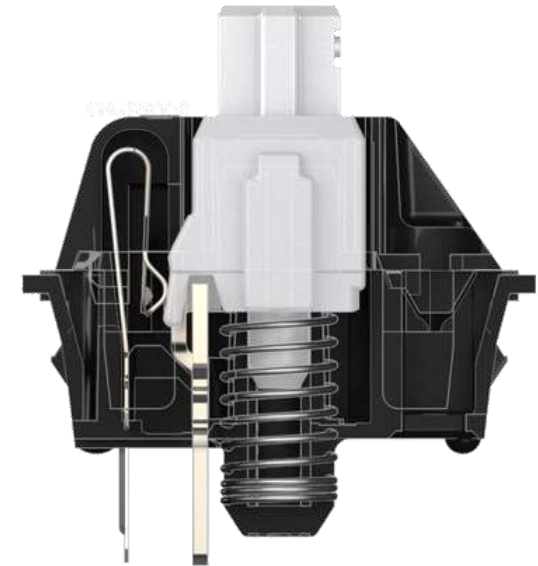
Components



CHERRY®

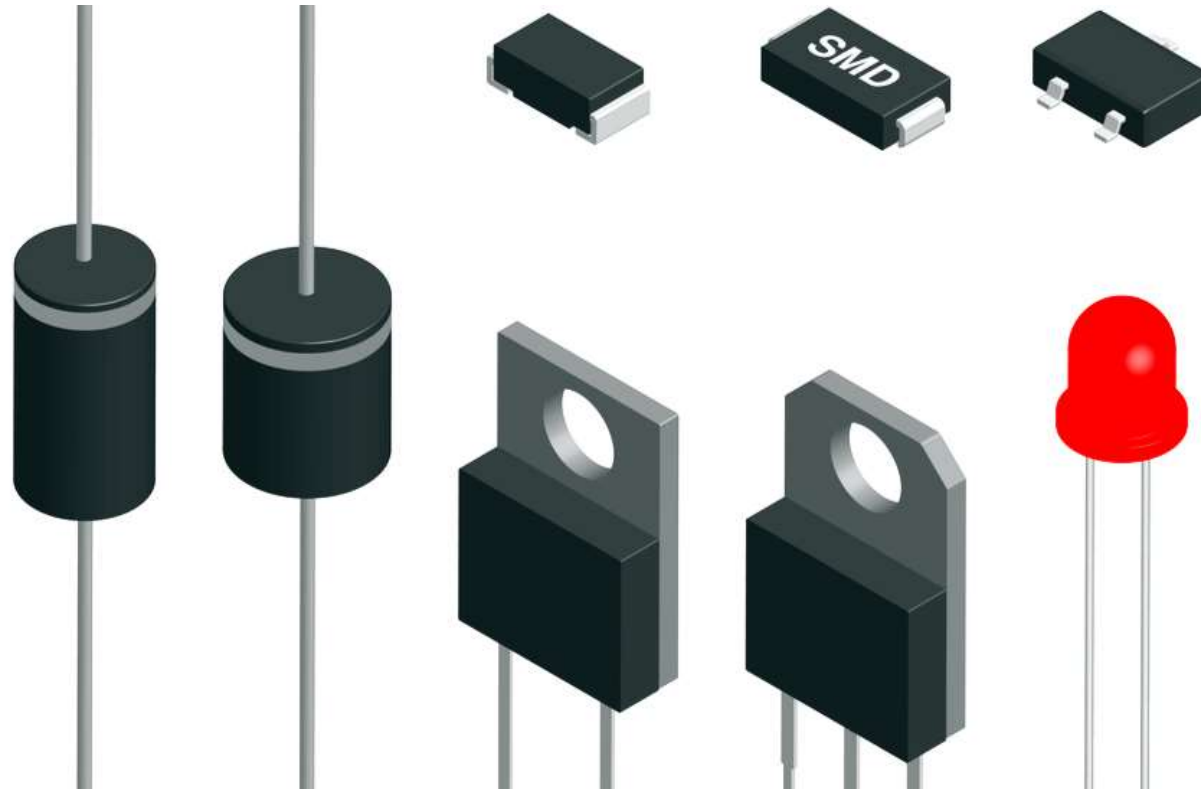


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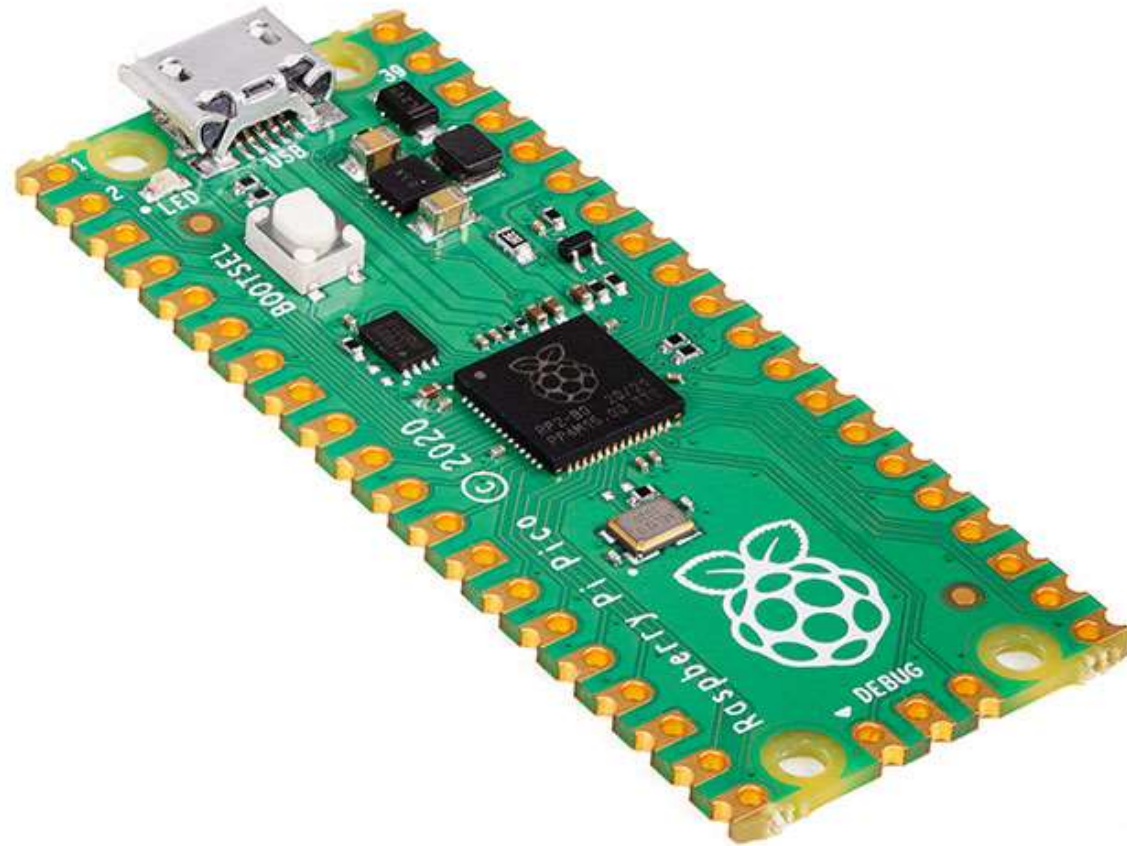


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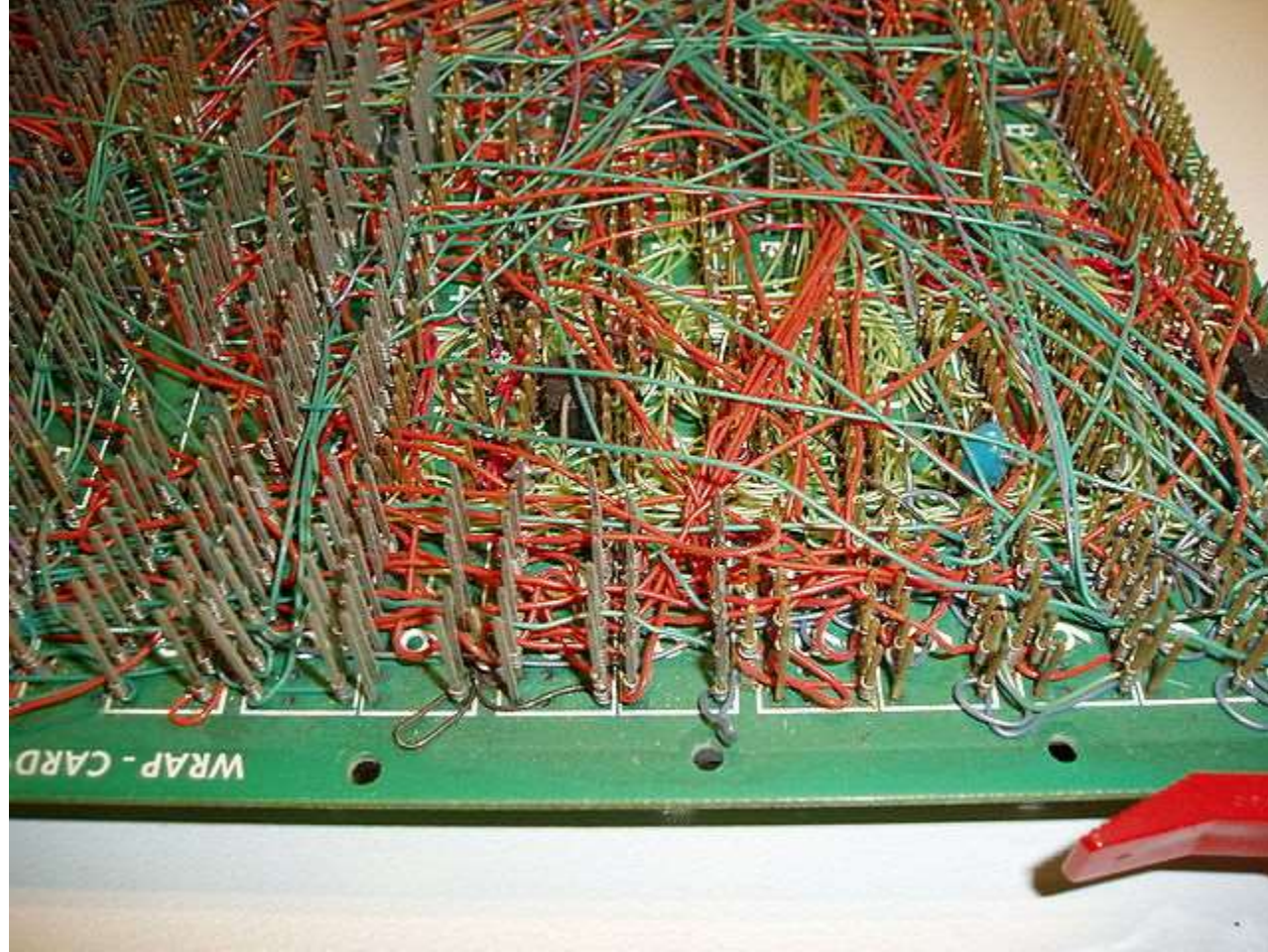
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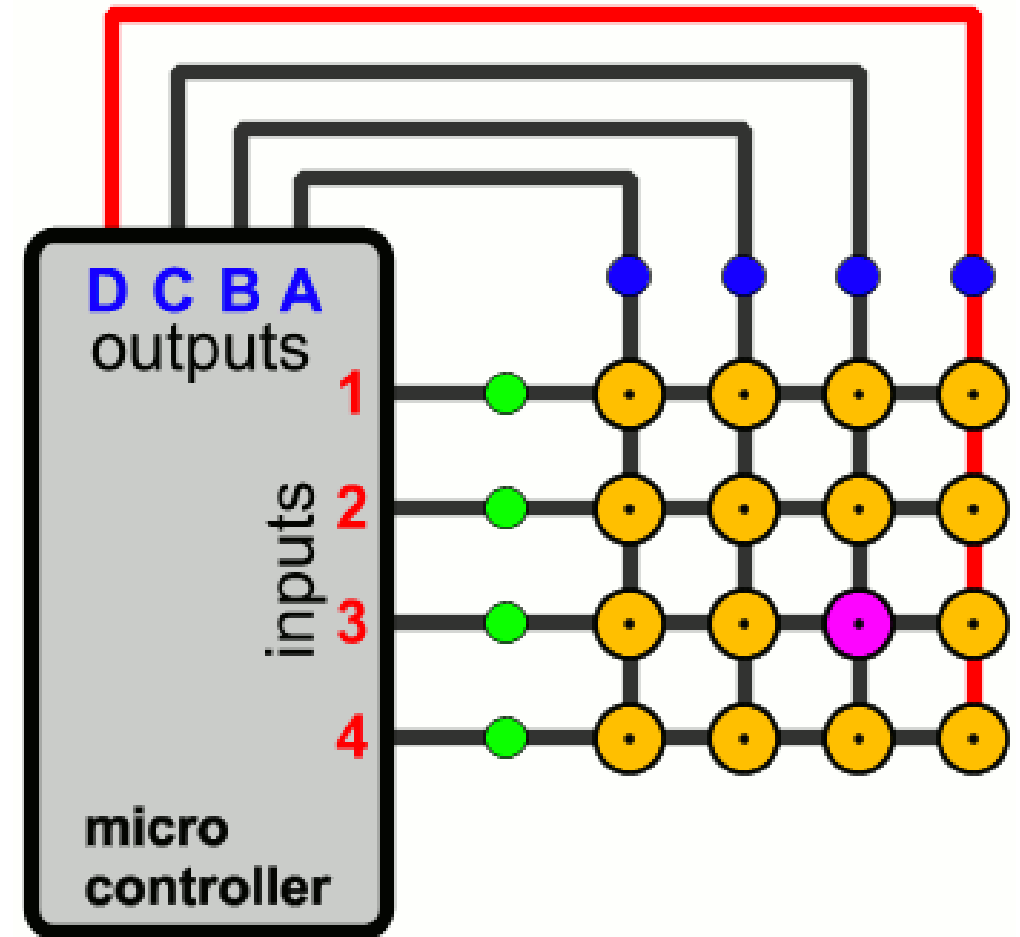
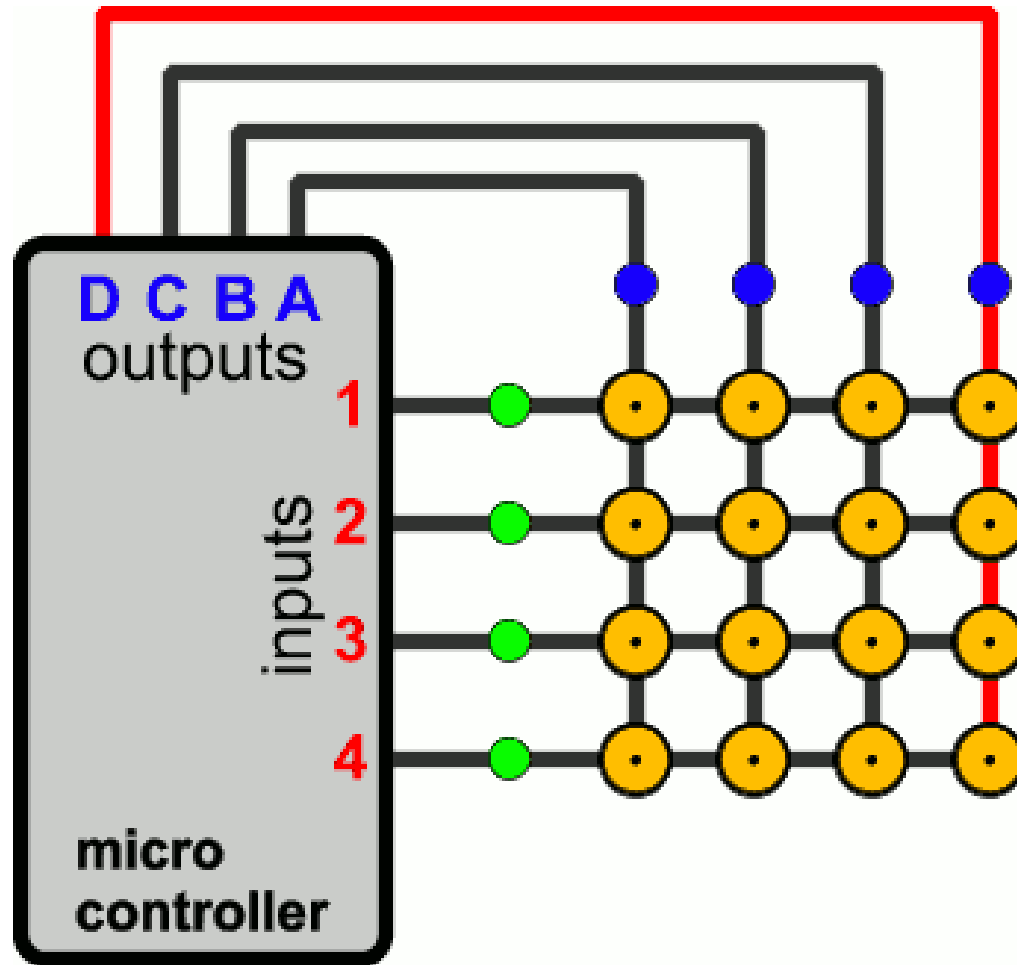
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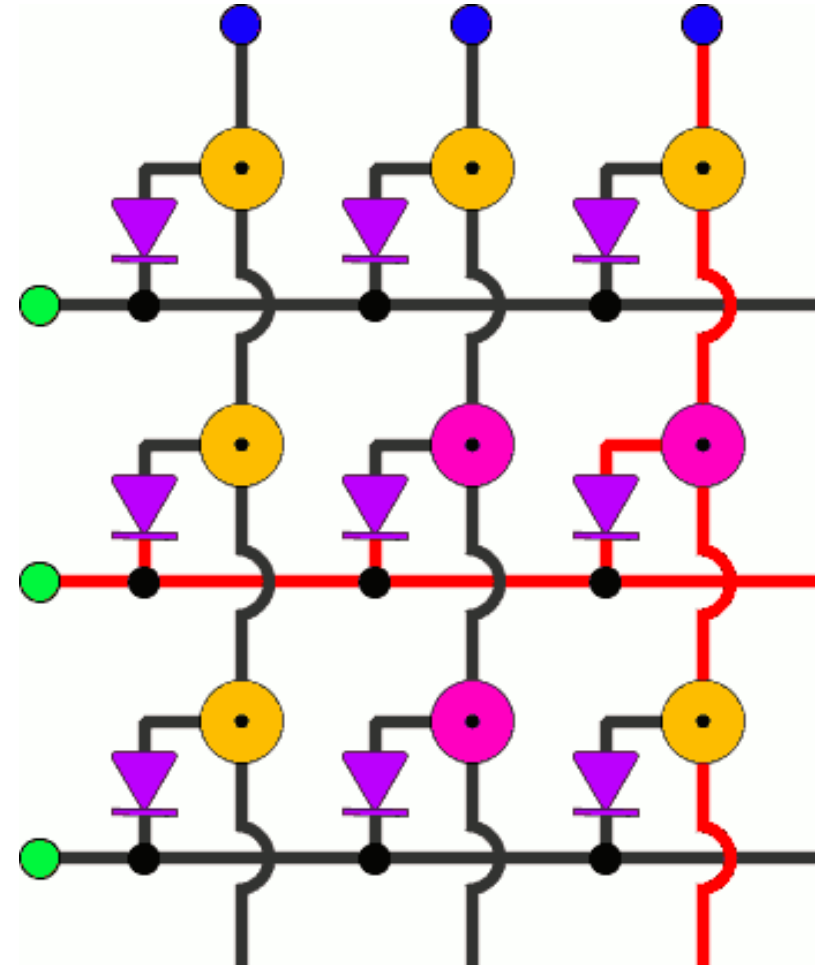
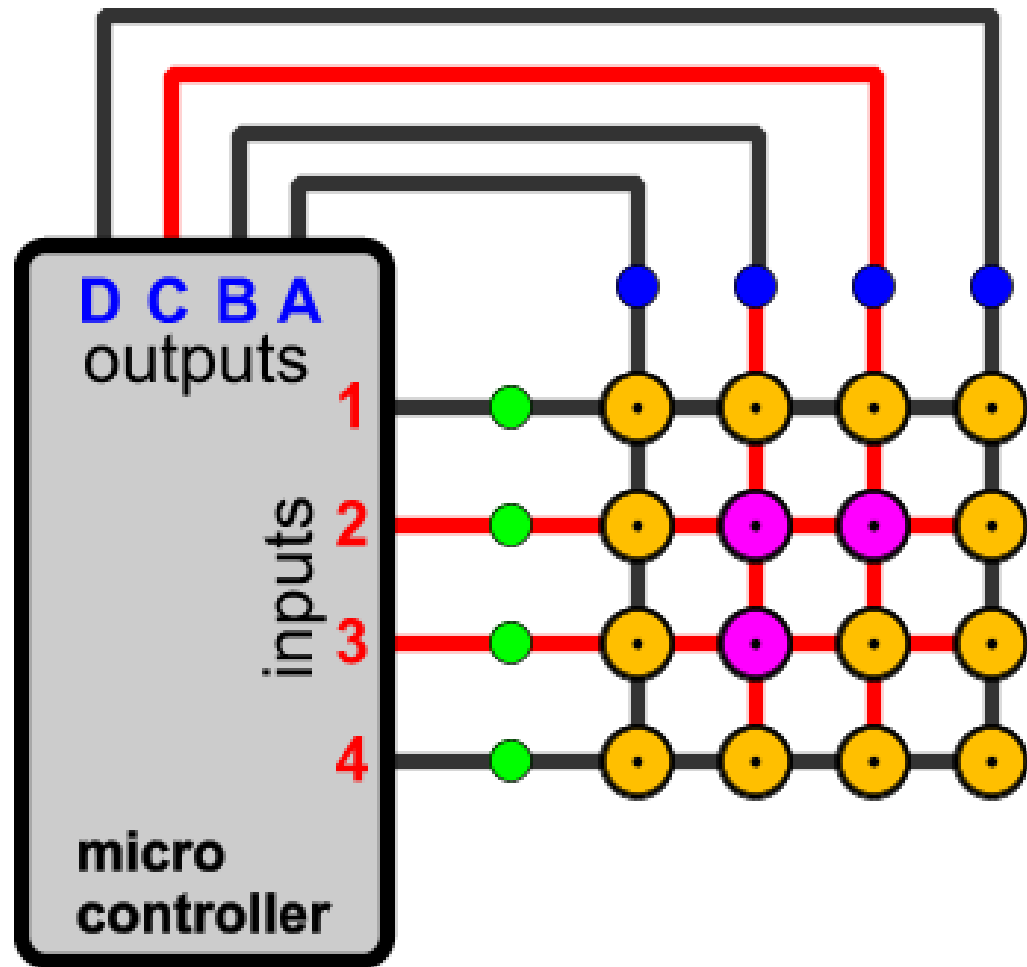
Keyboard Designs



Key Matrix



Diodes & Ghosting



Design Software(s)



Methods of Manufacture

- Othermill
- JLCPCB/PCBWay/etc.
- Silkscreening
- Acid Etching
- Hand-wire



Final PCBs

