

Static Electricity

By Paul Anderson



Static Electricity

- How it is generated



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- How it is generated
- How to control it



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- How it is generated
- How to control it
- Effects on Electronic Circuitry



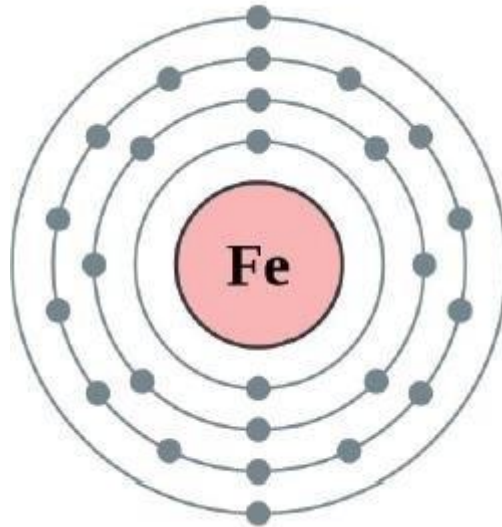
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- How to control it
- Effects on Electronic Circuitry
- Tips on wiring circuits



How Static is Generated

Static electricity is **the result of an imbalance between negative and positive charges in an object.**



How Static is Generated

Static electricity is **the result of an imbalance between negative and positive charges in an object.**

The friction of the two surfaces rubbing together knock electrons off the one surface and they collect on the other surface.

How Static is Generated

As you walk across a floor the friction between the soles of your shoes and floor surface knock electrons loose from the floor surface and they collect in your body until you touch a conductive object such as a light switch and the electrons are conducted back to the earth.

How Static is Generated

Your body acts as one plate of a capacitor and the earth acts as the other plate with the rubber or synthetic soles of your shoes being the dielectric or insulator.

How to Control Static

- Conductive Surfaces

How to Control Static

- Conductive Surfaces
- Personal Anti Static Devices

How to Control Static

- Conductive Surfaces
- Personal Anti Static Devices
- Humidity

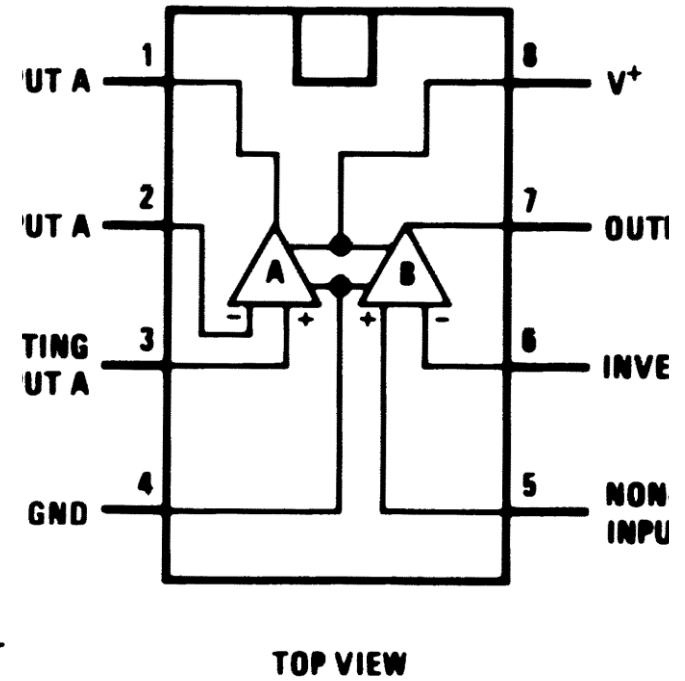
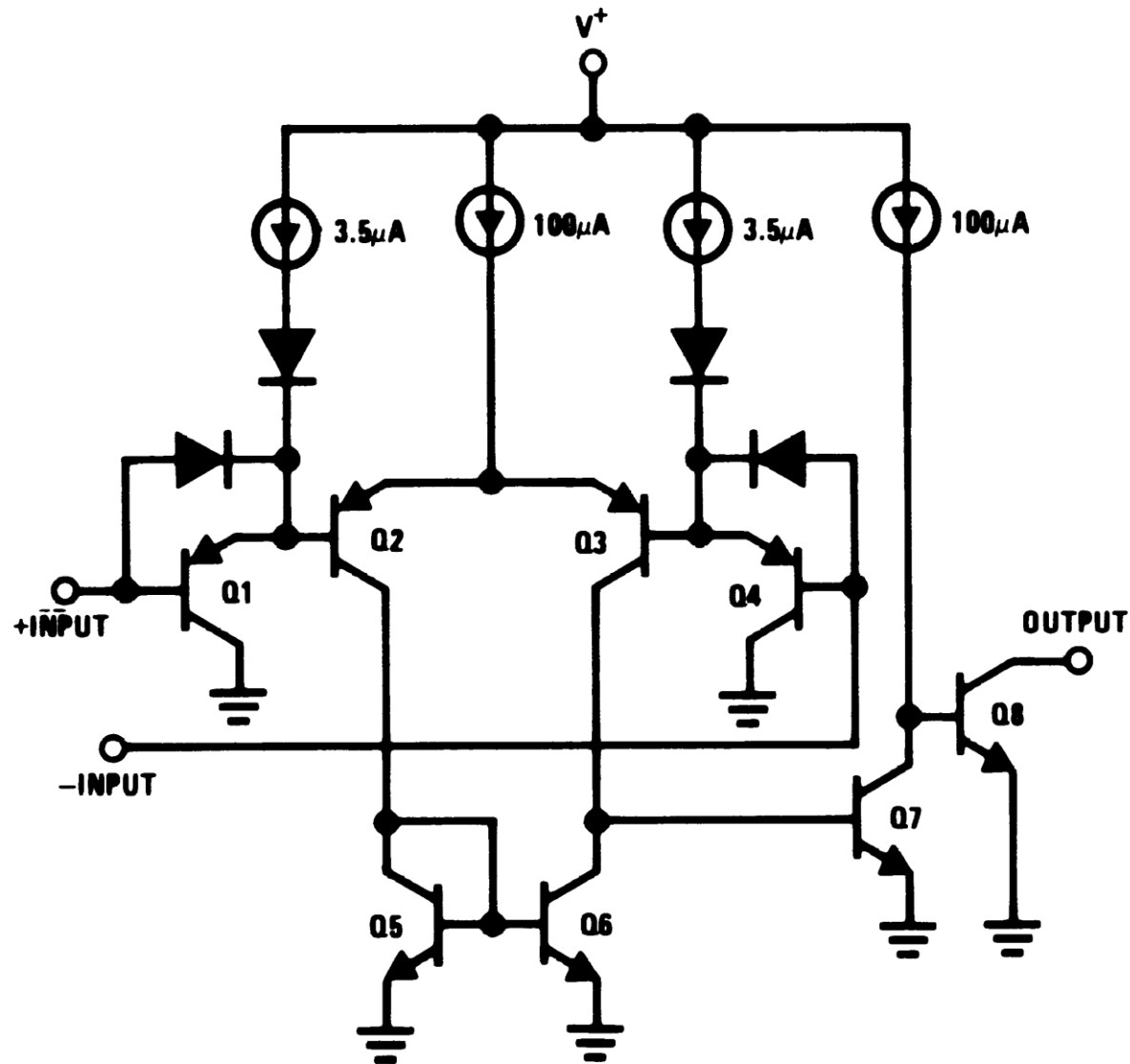
The effects of Static on electronic circuitry

The effects on electronic circuitry

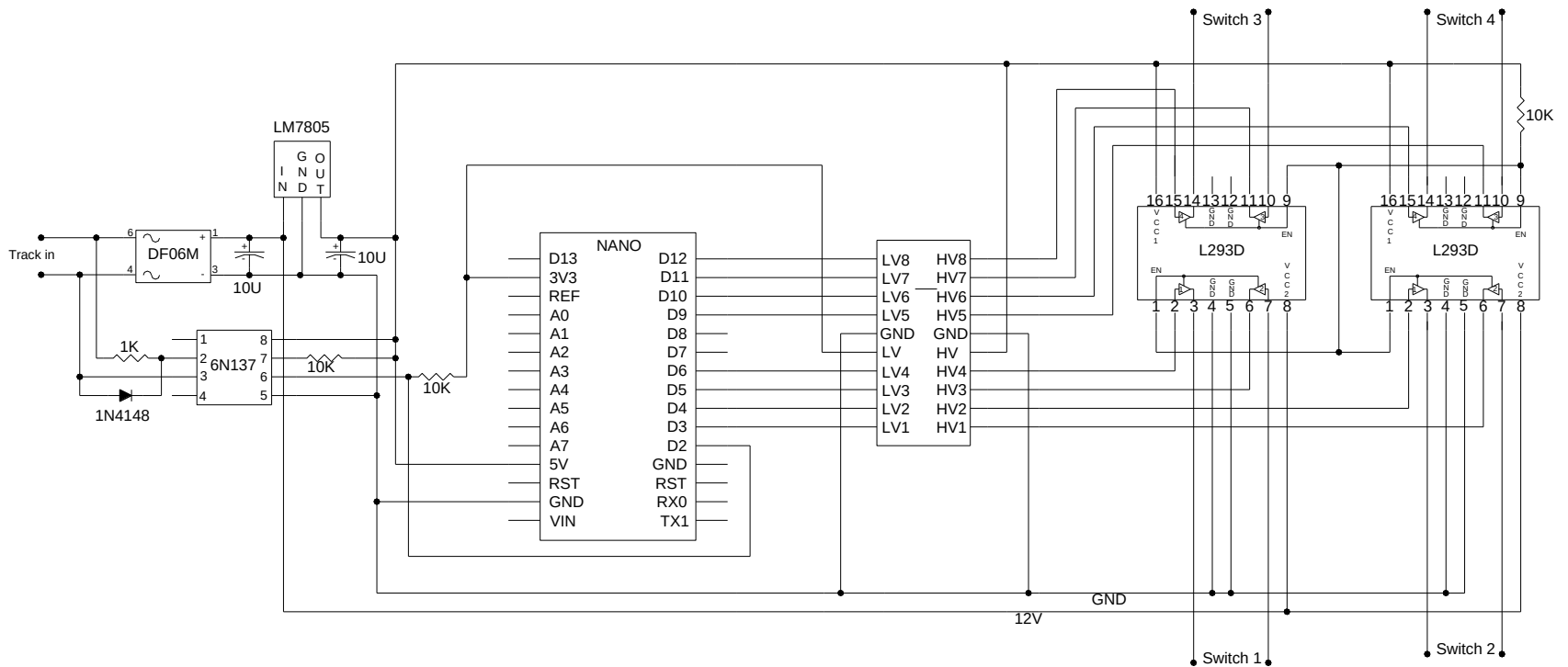
- Blows holes in insulating layers between conductors or components on the chip die.

Tips on wiring circuits

Tips on wiring circuits



Tips on wiring circuits



Questions