# How computers work

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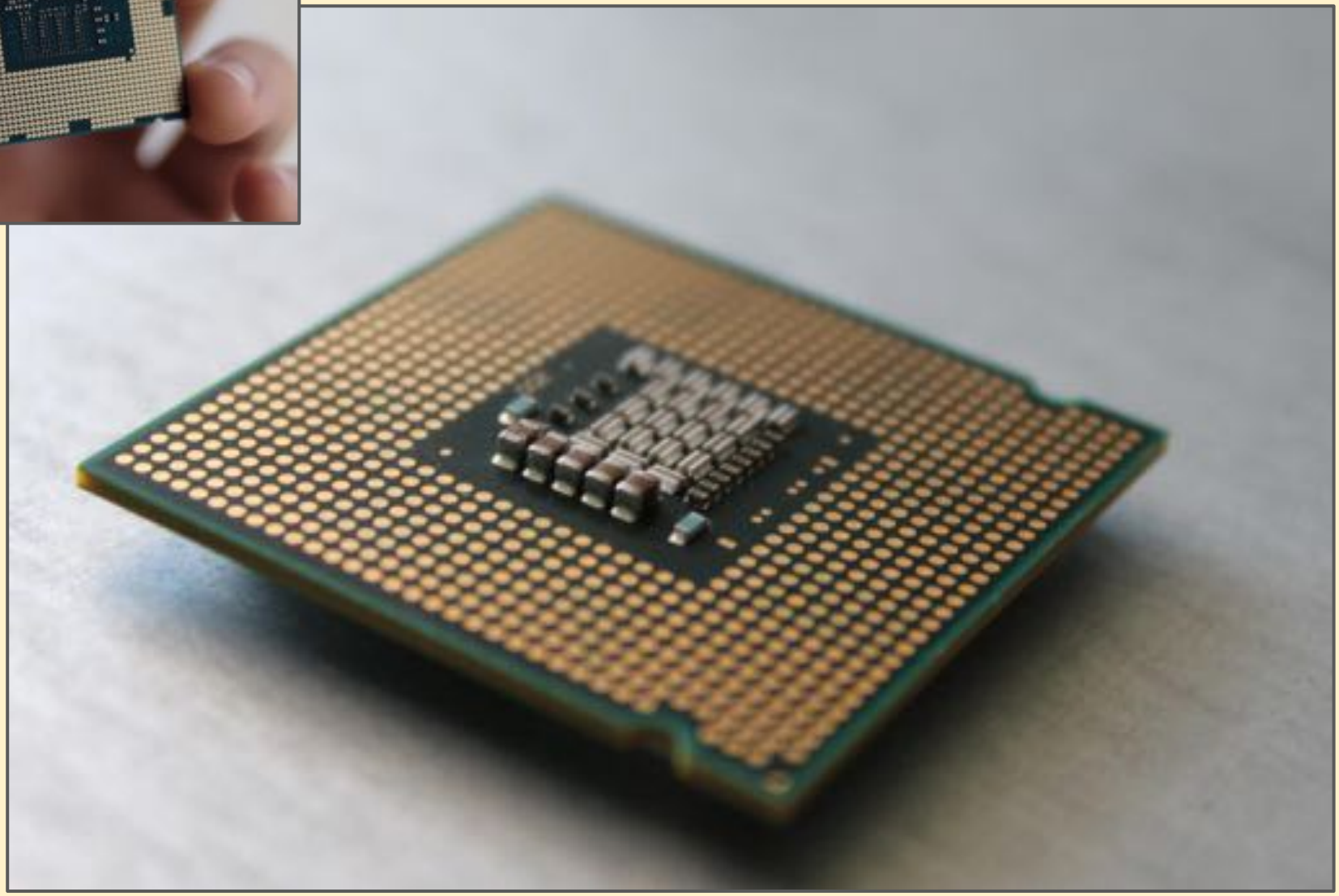
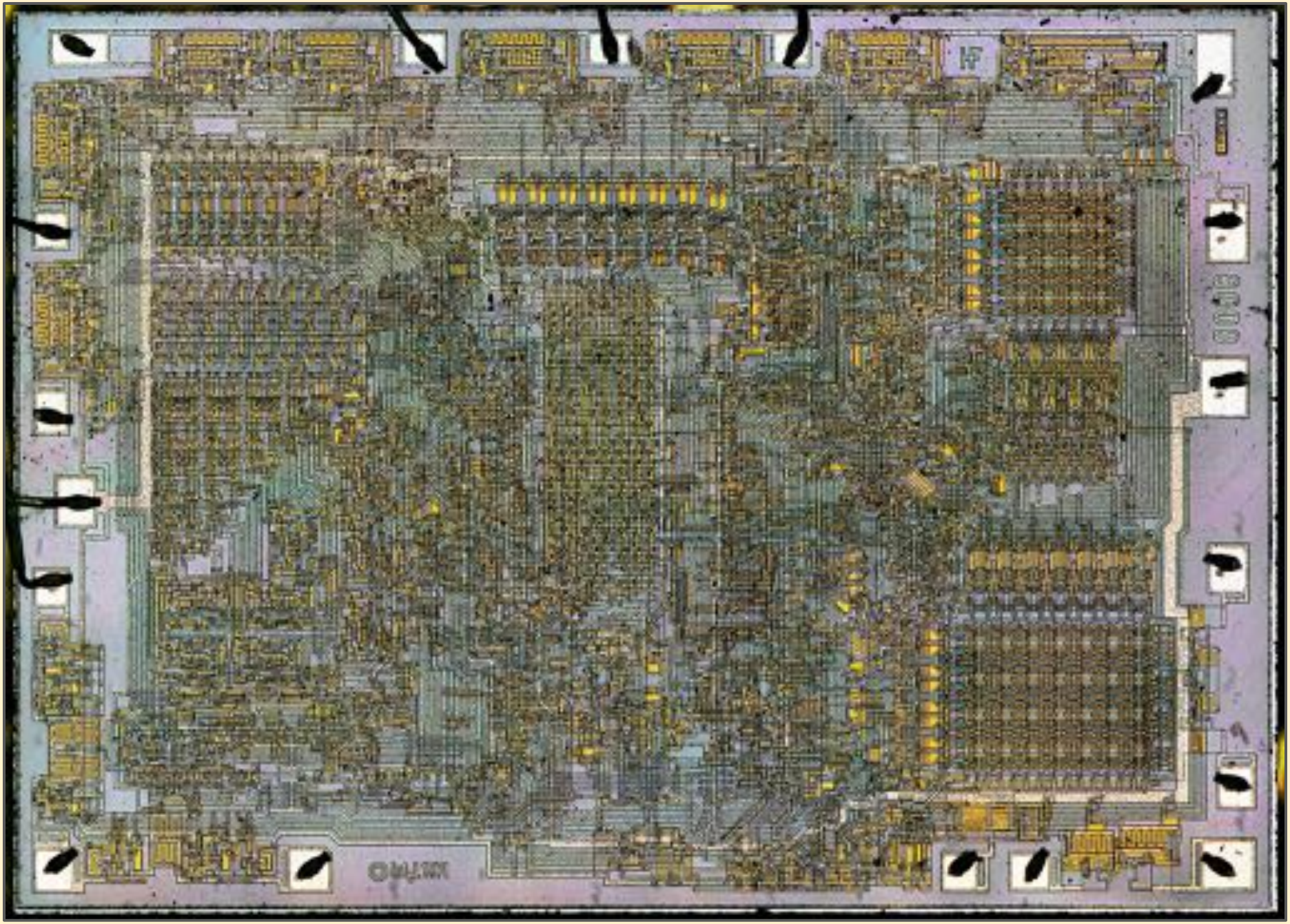
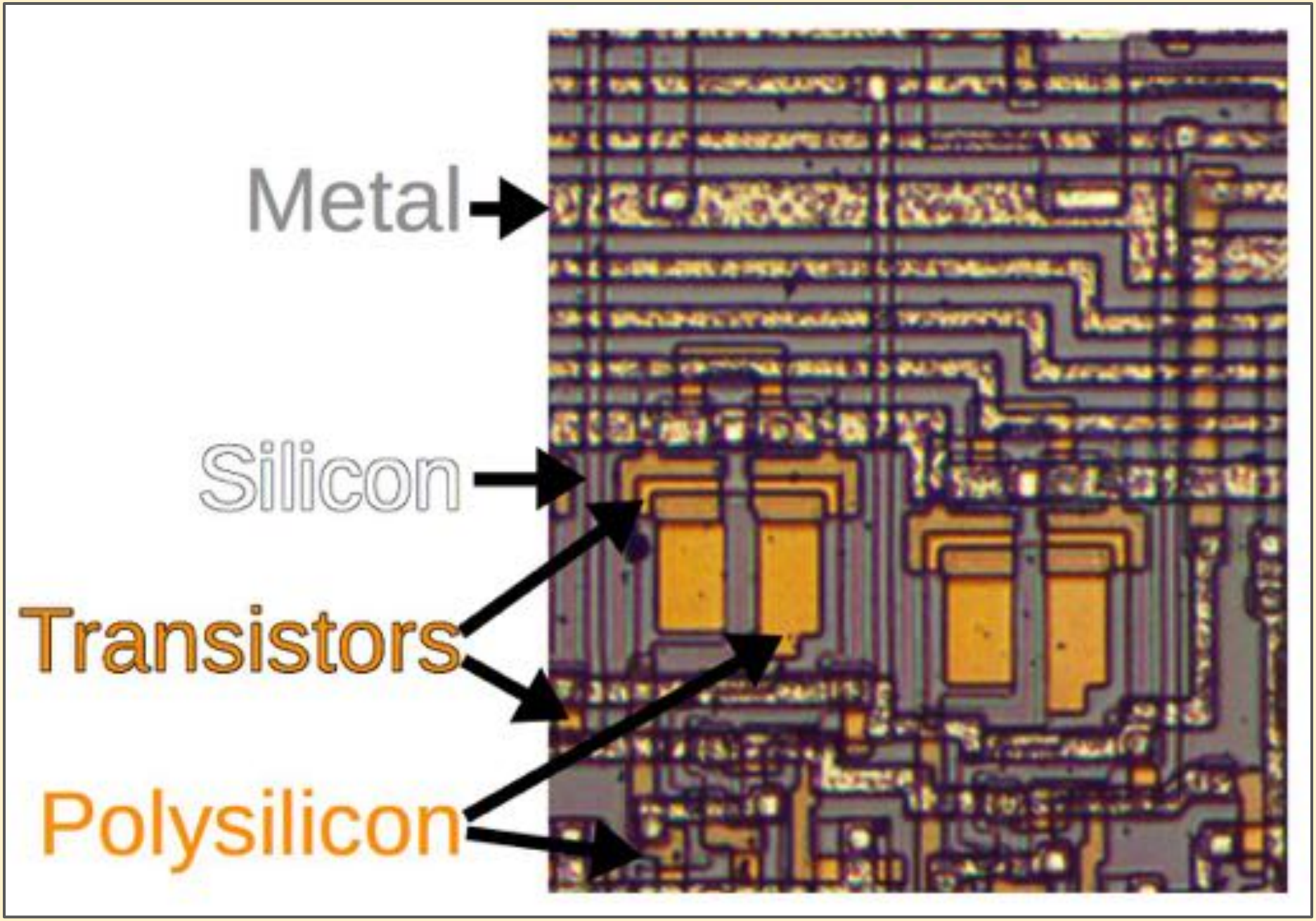
The switches are called **transistors**. They are tiny






Metal
Silicon
Transistors
Polysilicon

Say I have a bank of 4 switches

How many different numbers can I store?

Say I have a bank of 4 switches

How many different numbers can I store?

How many different combinations of ON and OFF are there?

OFF
OFF
OFF
ON

OFF
OFF
ON
OFF

# How computers work

This is how computers deal with numbers – using banks of switches.

- each switch can mean 0 or 1.
- combining switches means that bigger numbers can be stored.
- everything that computers store and process has to be reduced down to 0s and 1s – numbers, text, images, video, sound…