Source: [[KBPhysicsMasterIndex]]

1 | Silicon

- Integrated circuits changed computer circutries
- Circuts's sillicon purified as polycillion chunks
    - The cubic seed will form a new cubic sillicon
    - Impurities added to sillicon to cause it to conduct
    - Negative charged free carrier (asinic) ⇒ n type
    - Positive charged carrier (boron) ⇒ p type
- Christle ground to form ingots
- Then, sliced thin as wafers
- Wafers are then ground thin + removed of surface contaminates
- Then, wafers are checked for resistivity
- CMOS
    - n-type transitior sandwich a p type region
    - A charge on the gate wolud cause the charge to go through from source ⇒ drain
    - Vise, versa
- Meaning, when the P-N circut combinations are on, the N-P combination is off
- High temperature used to grow sillicon dioxide to protect the sillicon as sillicon interacts with pure exygen
- Photoresist smeared on the wafer, and light is exposed to each part to etch patters
- Then, lazers/plasma/acid guides etching of the wafer suface
- Plasma implimant impurities to cause conductivity
- Photoresist then washed off
- The wafer is then cleaned off

Then, the actual circut wires are introduced:

1. Deposition of sillican oxite
2. Photolithagraphy, masking + etching
3. Depositivion of tusten as pulig
4. Deposition + potterning of alluminum alloy as wires

Lastly, the water is put into pieces to be placed onto circuts.