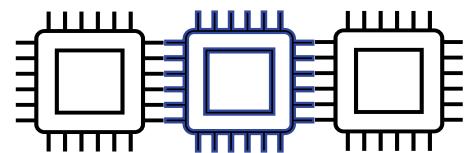
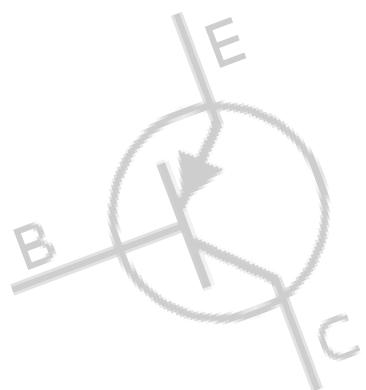


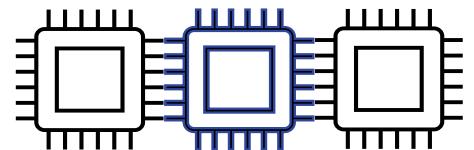
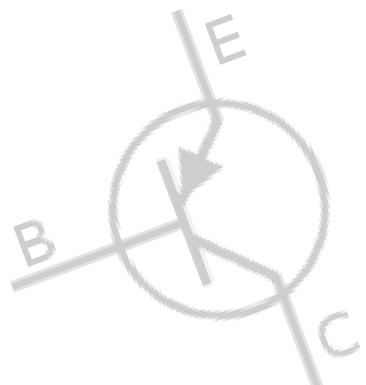
# Processador



# CPU



Central Processing Unit, Unidade  
Central de Processamento.

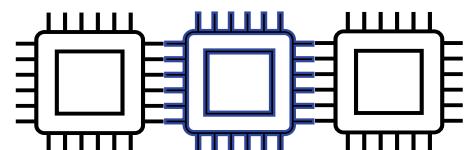
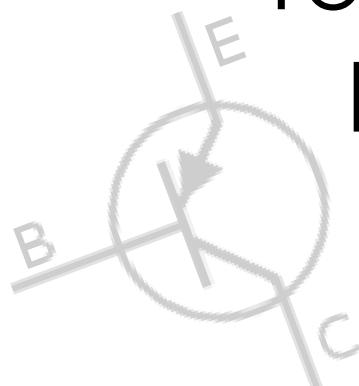


# Processador



É responsável por calcular e realizar as instruções solicitadas pelos programas.

Todas as ações dos nossos computadores precisam ser calculadas.

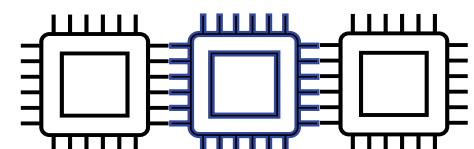
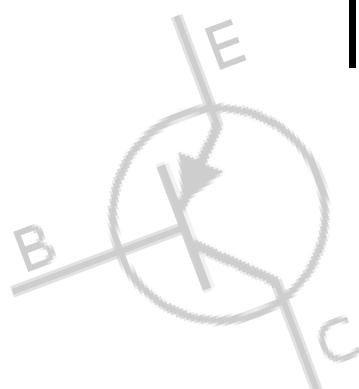


# Válvula Termiônica



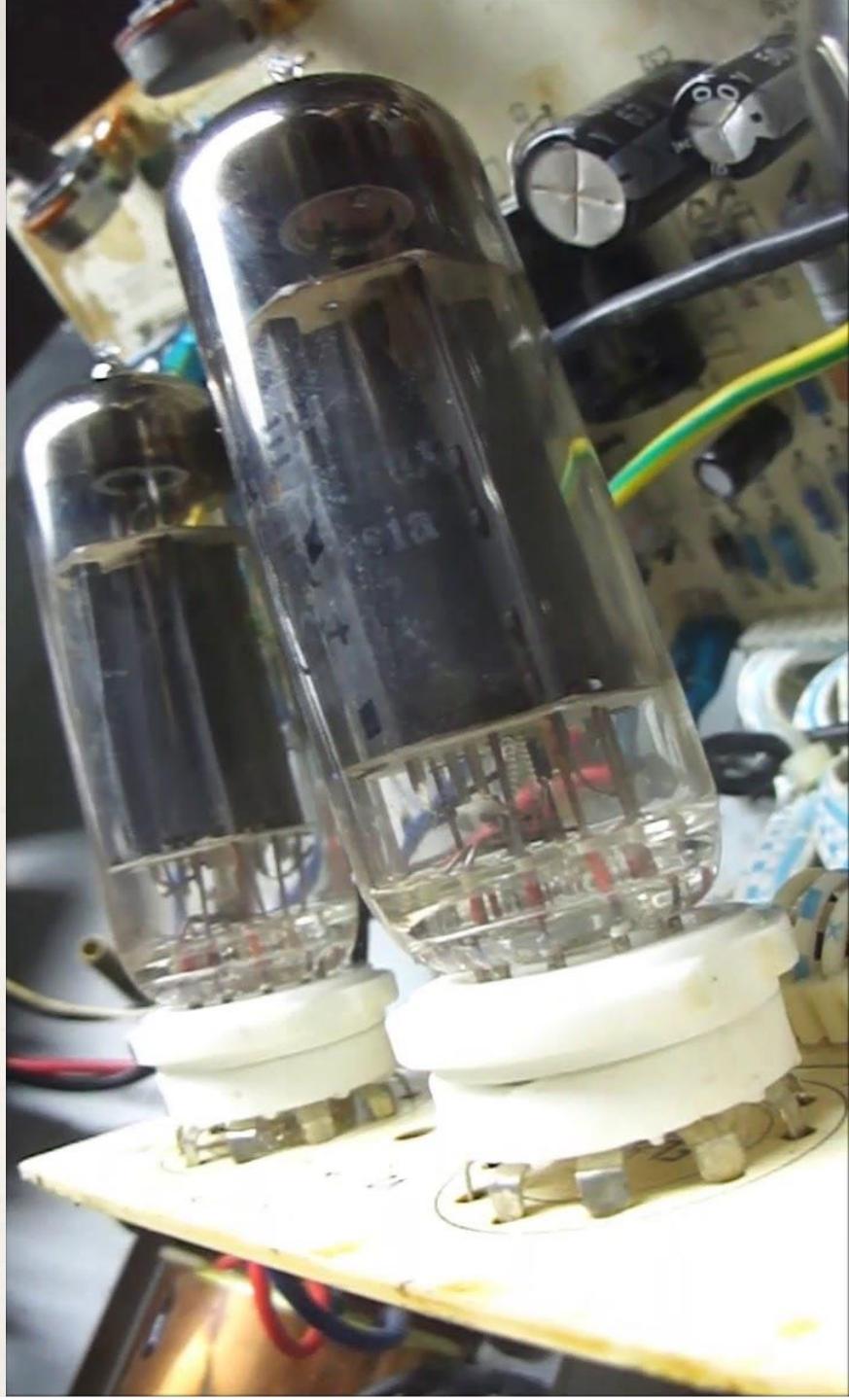
Lançada em 1906 por Sir. John Ambrose Fleming.

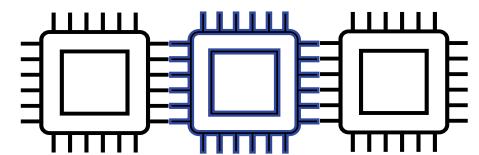
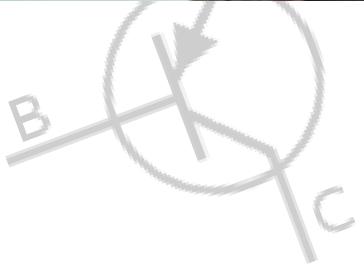
É um dispositivo que utiliza o princípio da emissão termiônica, onde eletros são liberados por um filamento aquecido.

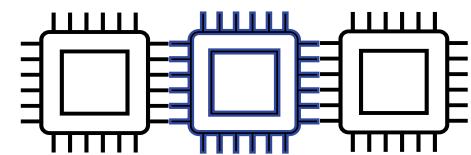
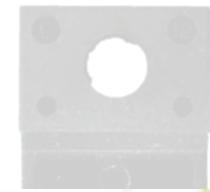


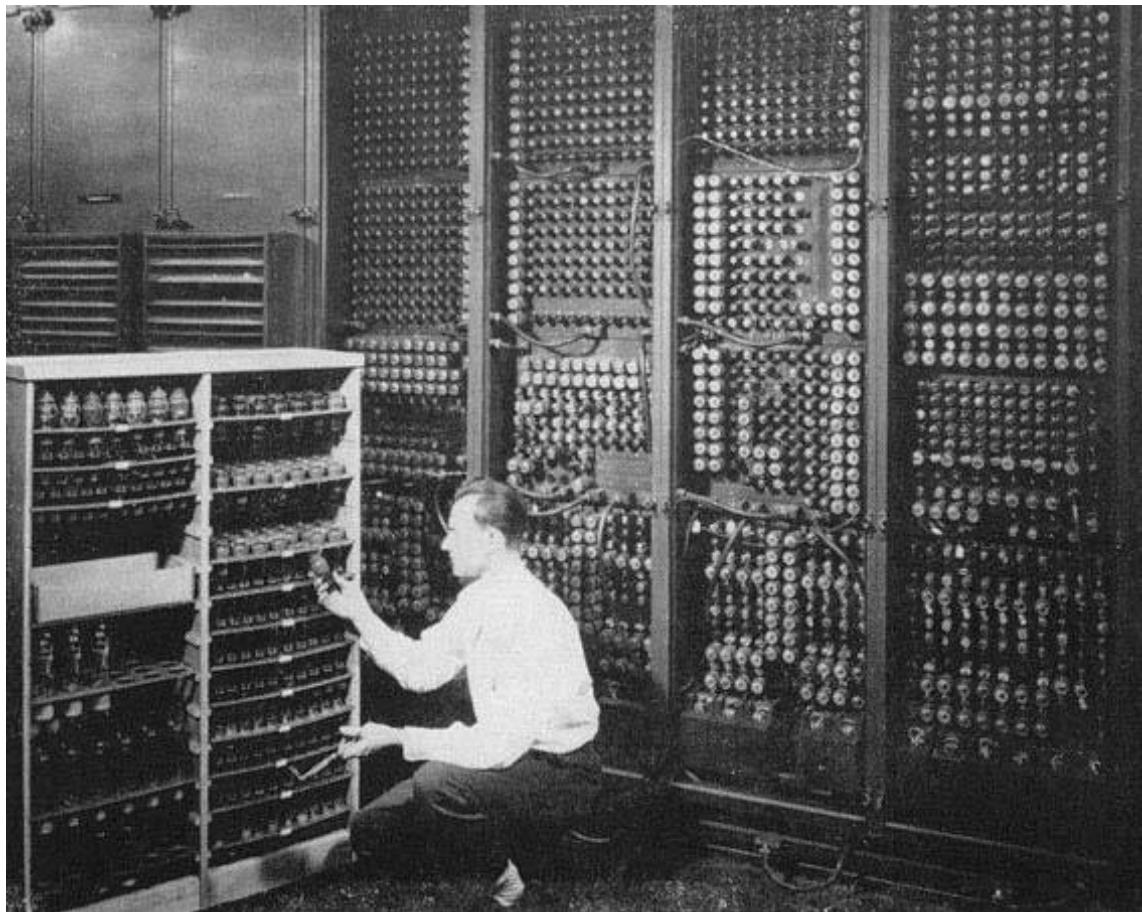


100,00 mm

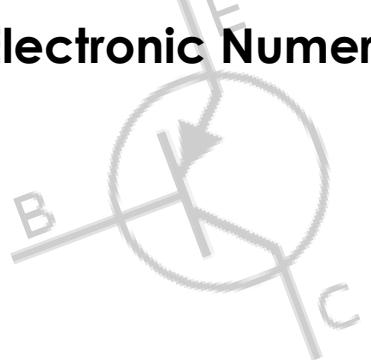




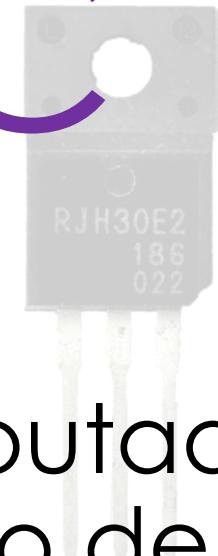




Electronic Numerical Integrator and Computer

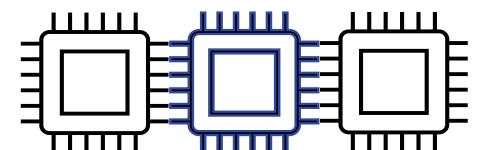


# ENIAC



Foi o primei computador digital eletrônico de grande escala.

Lançado em fevereiro de 1946

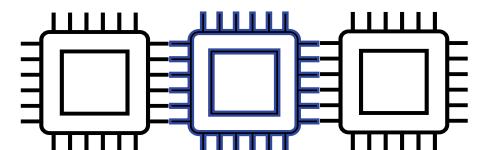
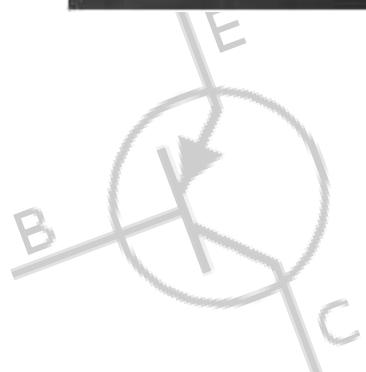




# ENIAC

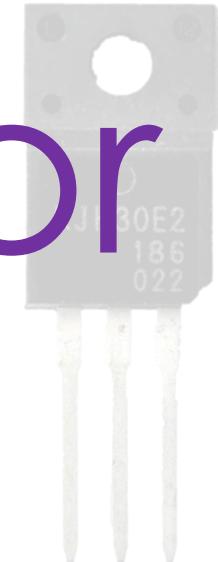


Criado pelos cientistas norte americanos:  
John Eckert e John Mauchly, da Electronic Control Company.

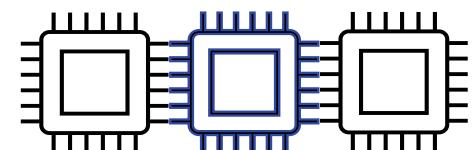




# Transistor



Lançado em 1947  
O nome deriva de:  
Resistor de Transferência  
**TRAN**sfer re**SISTOR**





John Bardeen, William Shockley e Walter Brattain

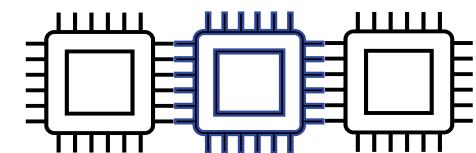
LIFE



B  
G  
C

# Silício

Bom condutor de eletricidade  
**Transferência e resistência**



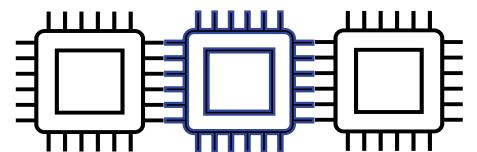


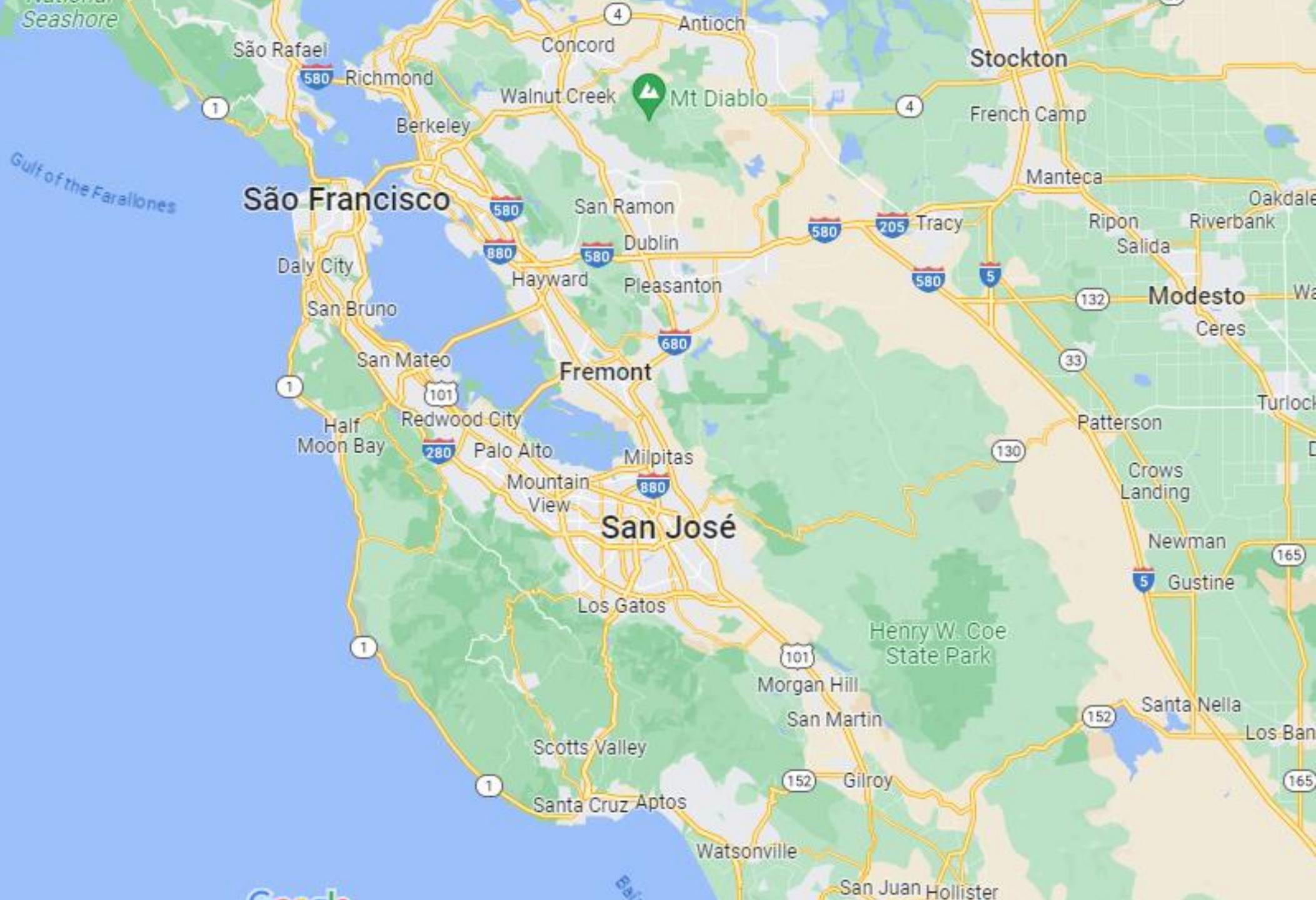
# Silício

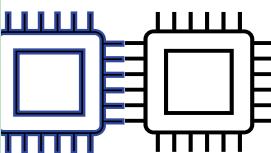
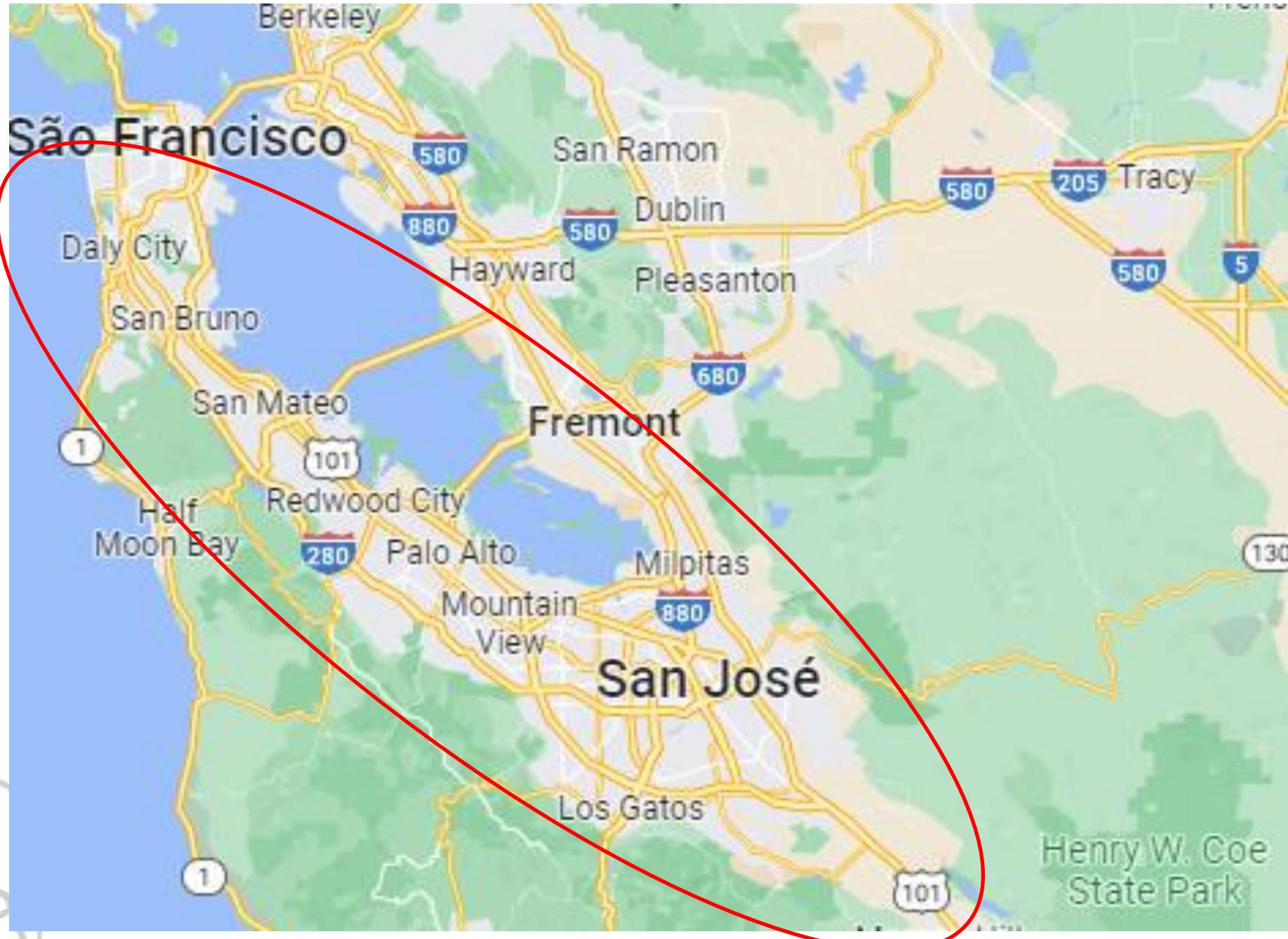
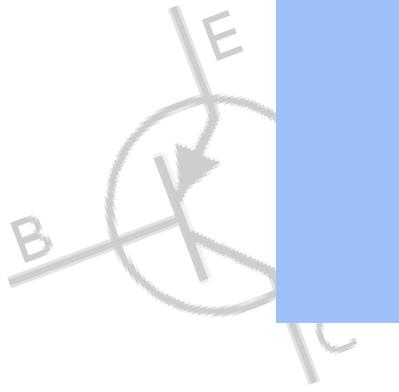


Abundância na terra 28% do planeta é formada por silício.

Não é o melhor condutor, mas é disparado mais o barato.

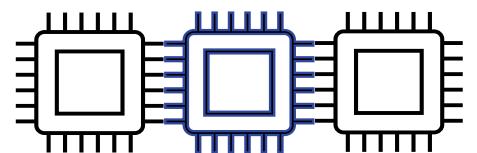
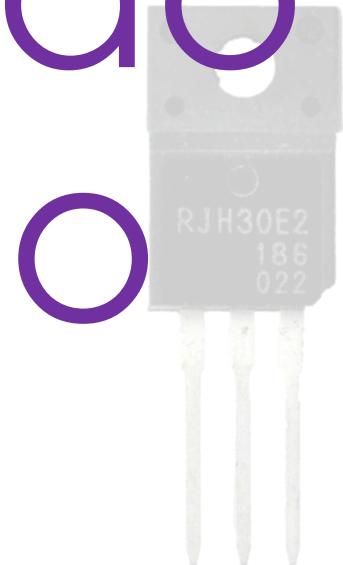


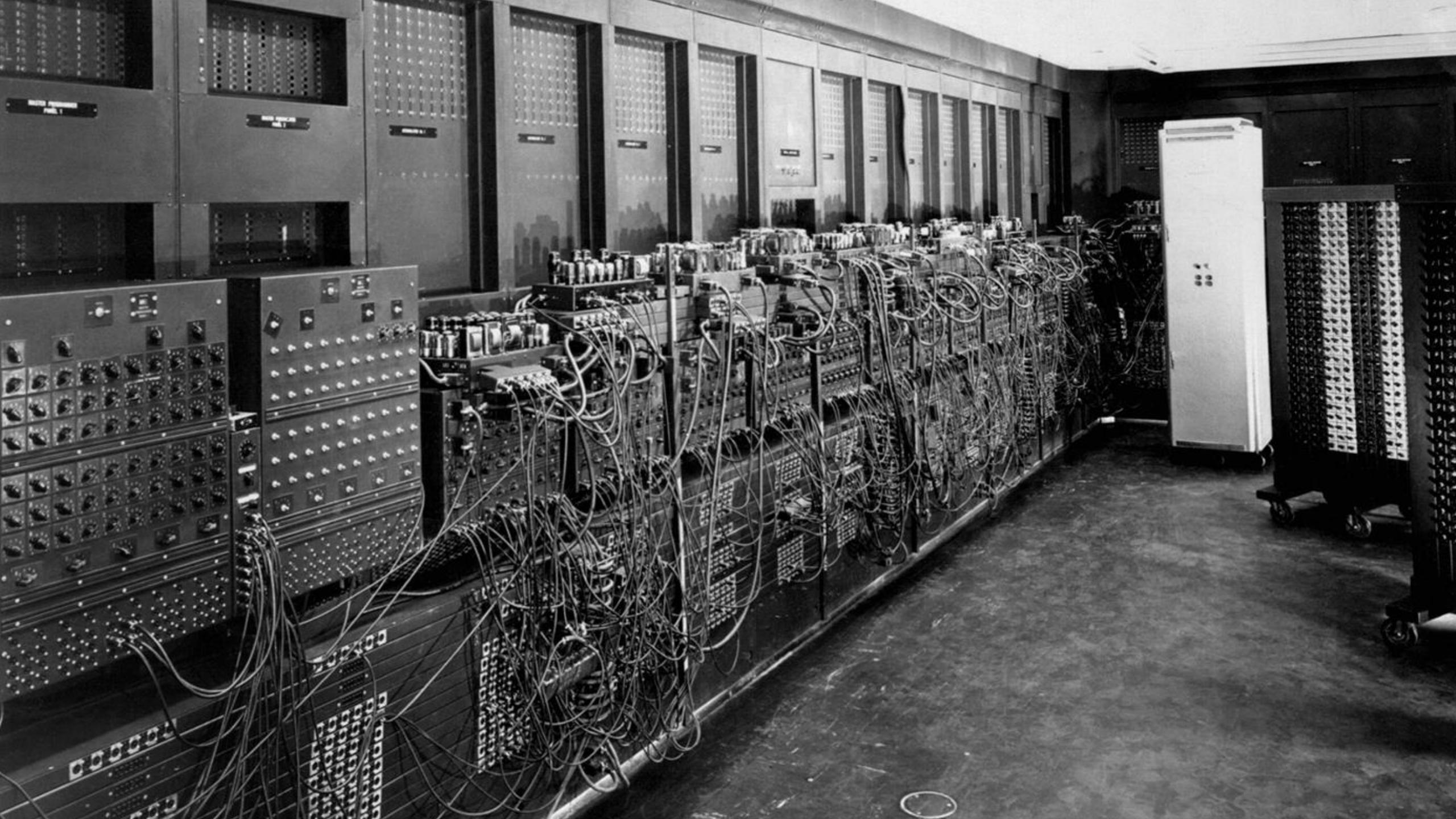






# Vale do Silício

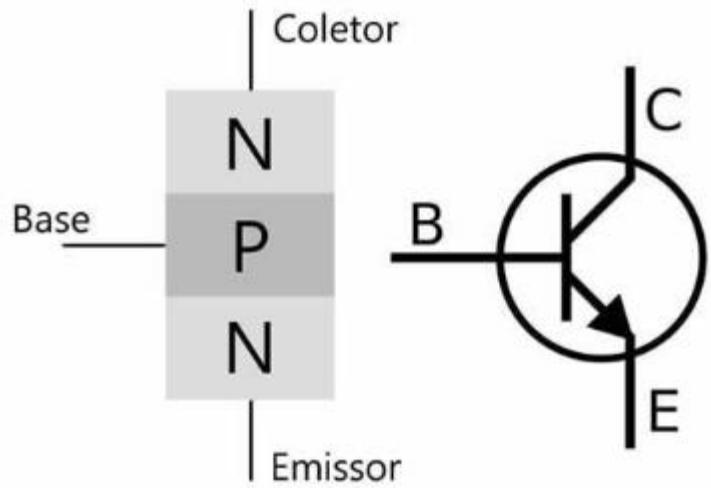




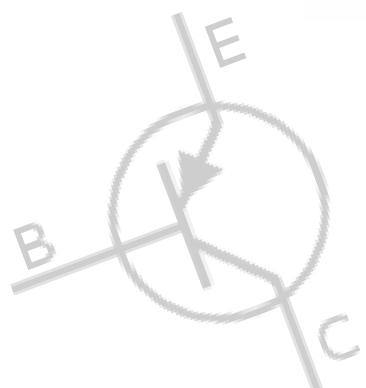
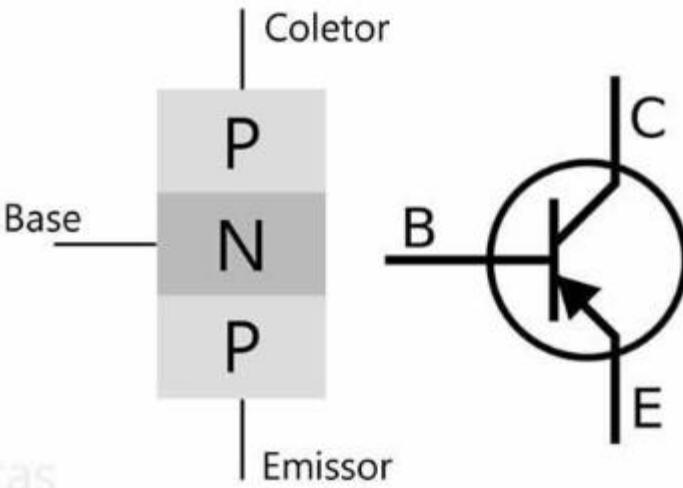


# Encapsulamento de silício

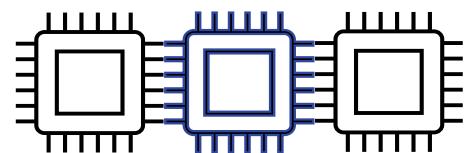
## Transistor NPN



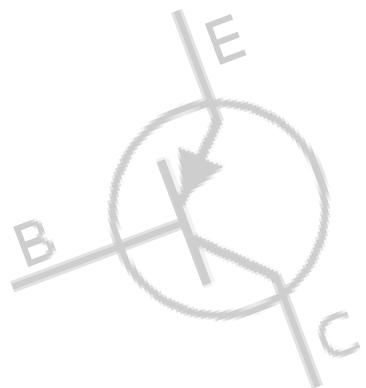
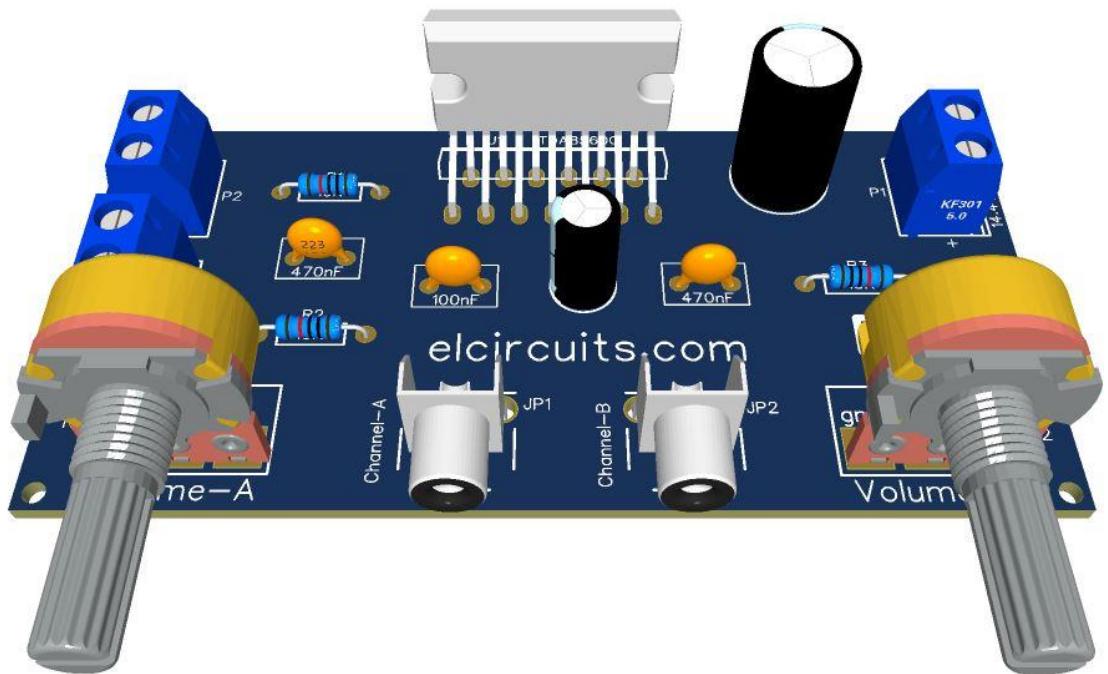
## Transistor PNP



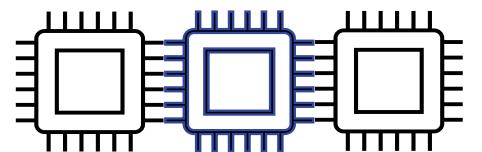
tecdicas



# Circuito Integrado

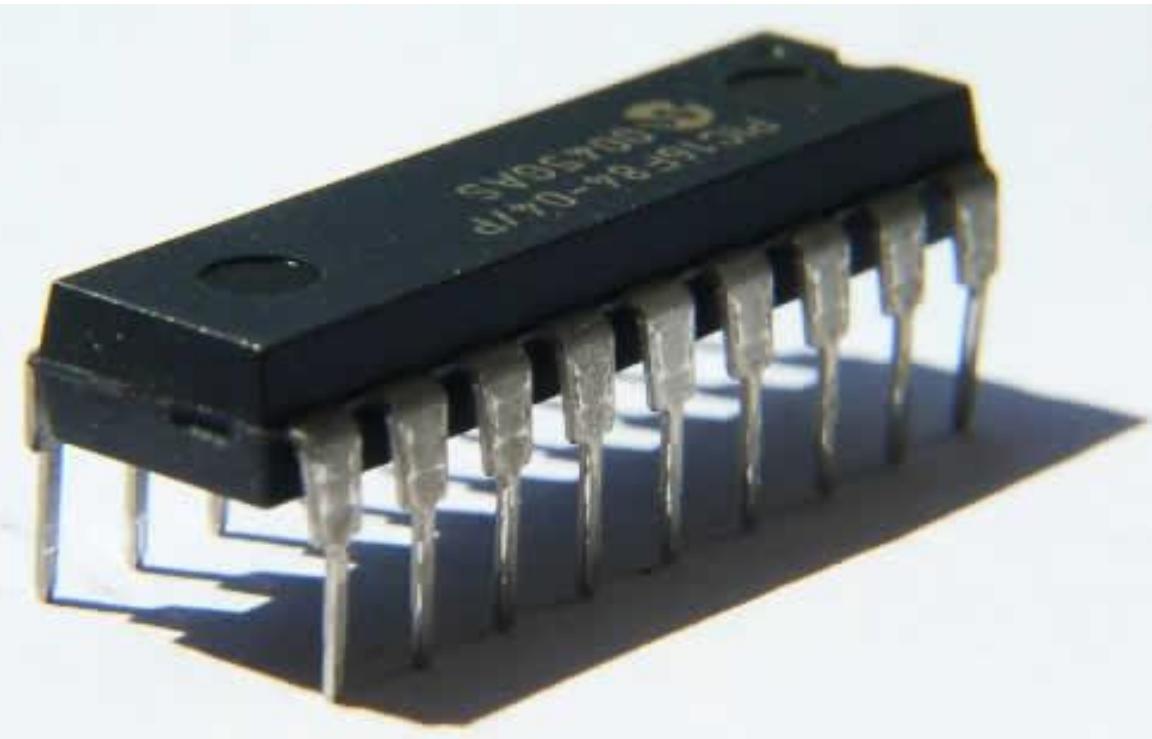
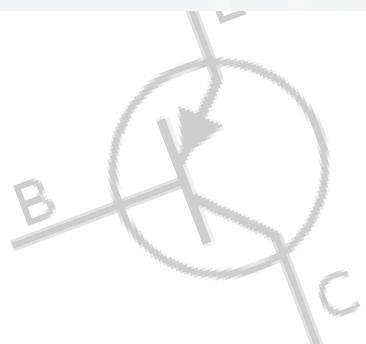
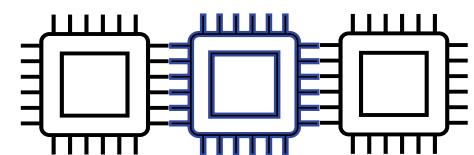


Lançado em 1958  
Pelos cientistas da  
Texas Instruments



# Circuito Integrado

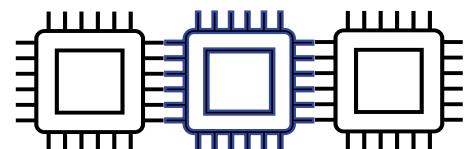
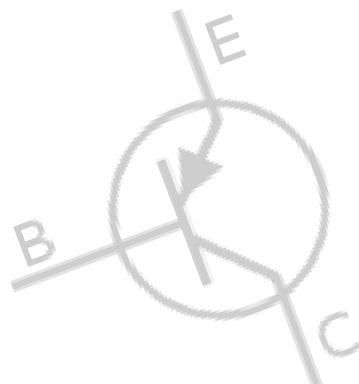
Lançado em 1958  
Pelos cientistas da  
Texas Instruments



# Nanometros



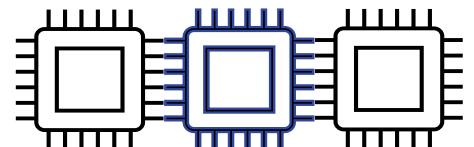
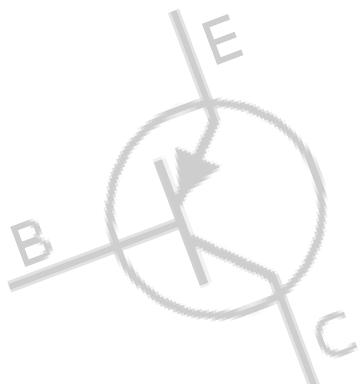
É o espaçamento entre os transistores, quanto menor o seu tamanho, melhor será o seu desempenho e maior será o calor.



# Memória Cache



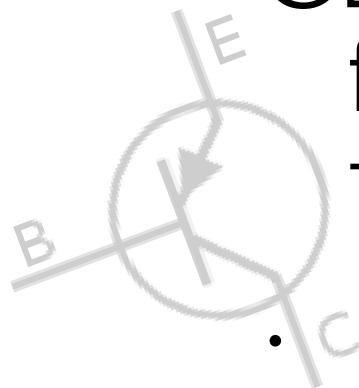
Ou Cache L2 /L3 – é um tipo de memória utilizada pelo processador para armazenar as últimas funções executadas.



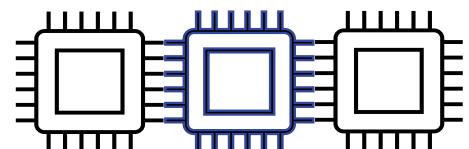
# Clock do Processador



**CLOCK INTERNO** - frequência que o processador trabalha internamente.



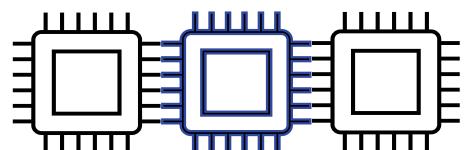
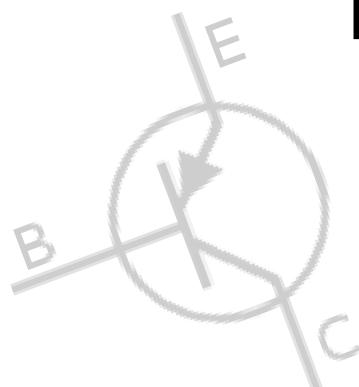
**CLOCK EXTERNO** - FSB (Front Side Bus), frequência que o processador trabalha com as memórias.



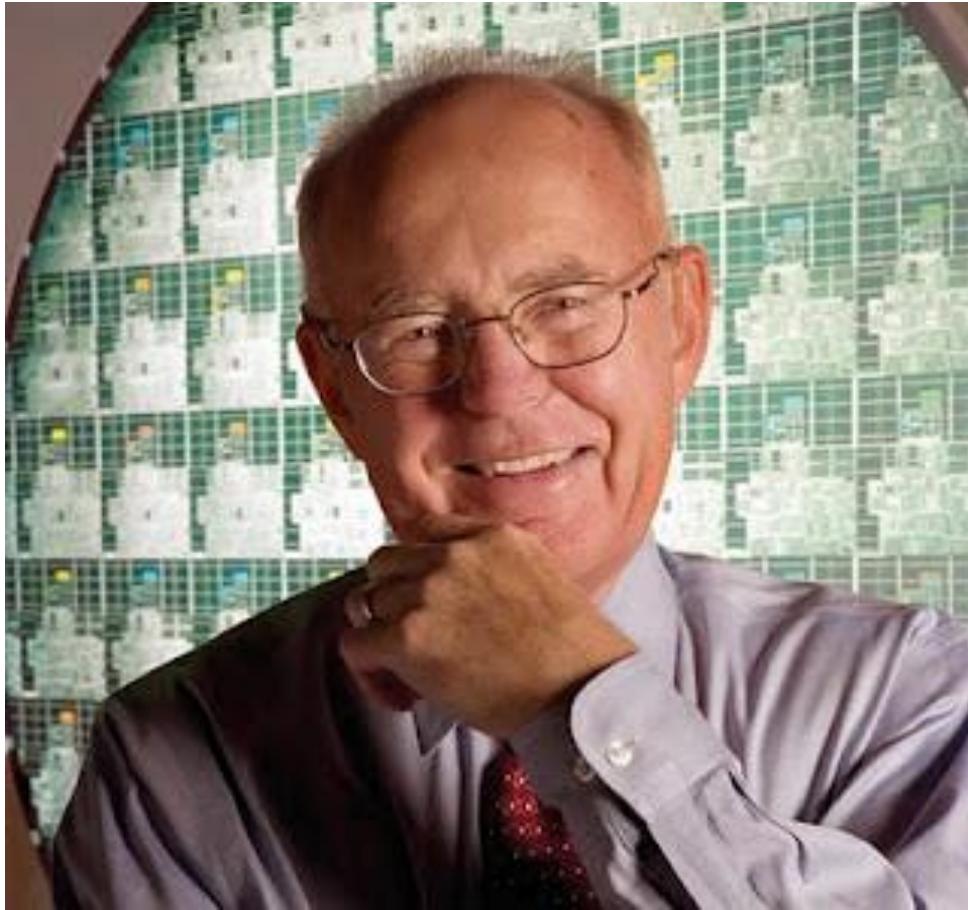
# A lei de Moore



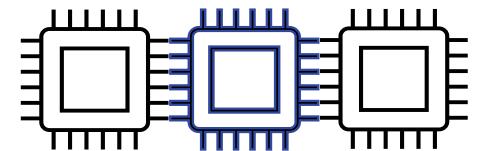
Em 1965 Gordon E. Moore  
Profetizou: “o número de transistores dos chips teriam um aumento de 100%, pelo mesmo custo a cada período de 18 meses.



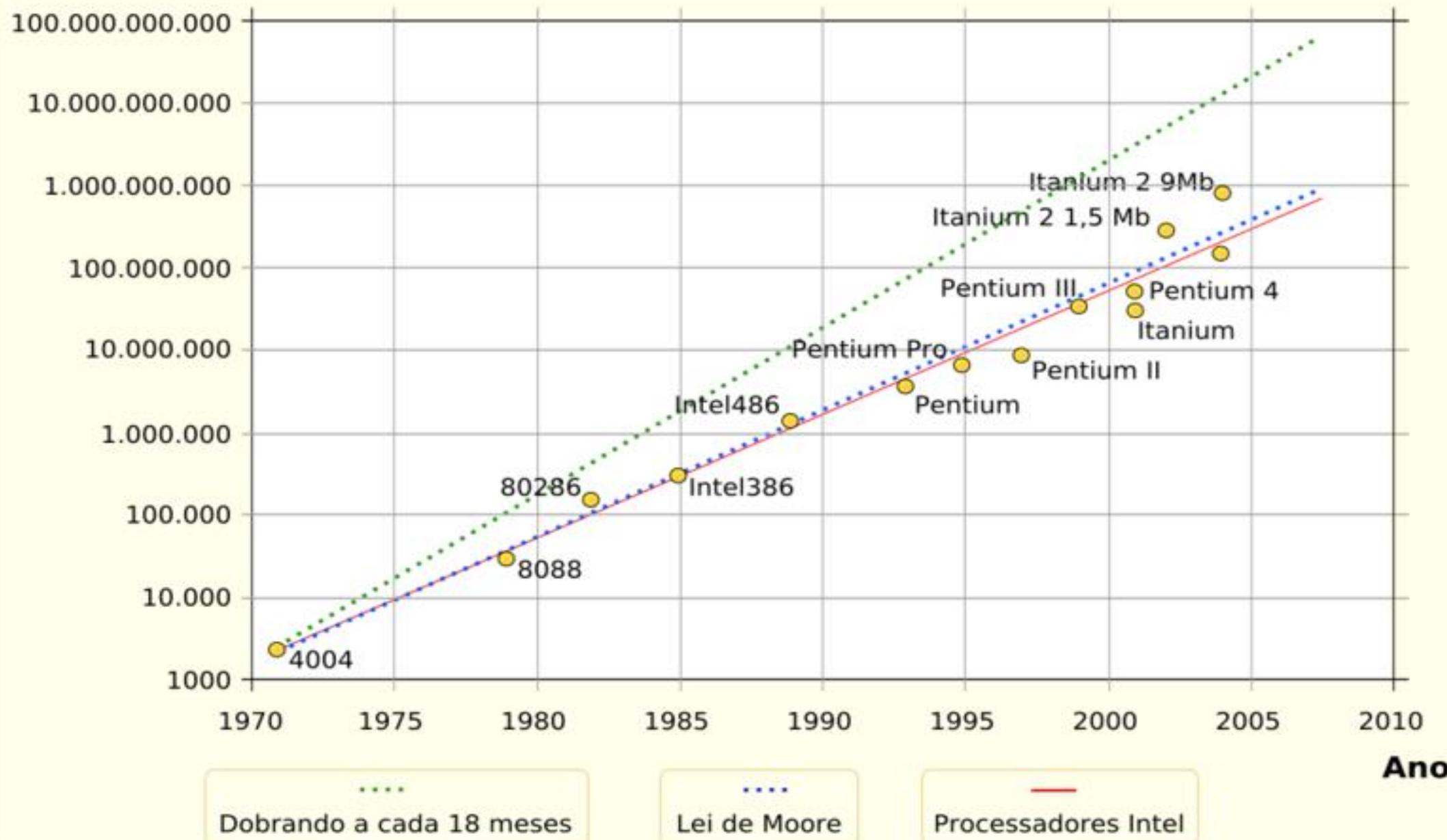
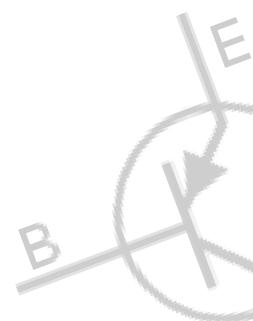
# A lei de Moore



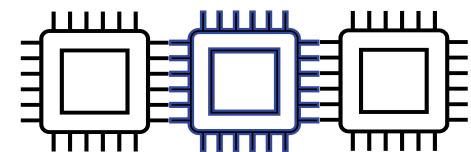
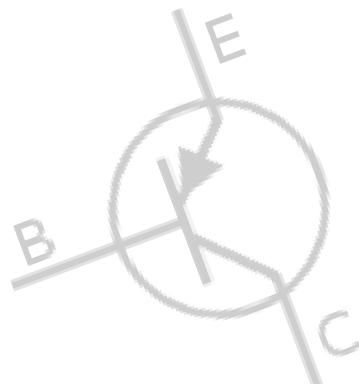
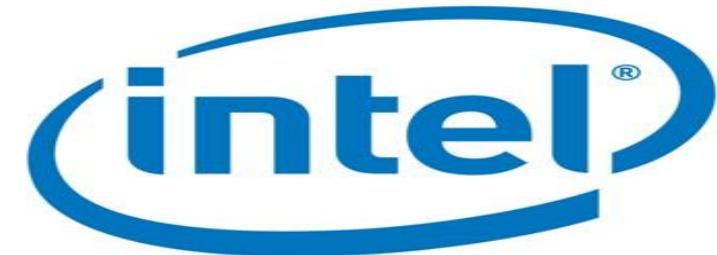
Gordon Moore

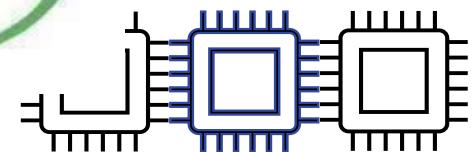
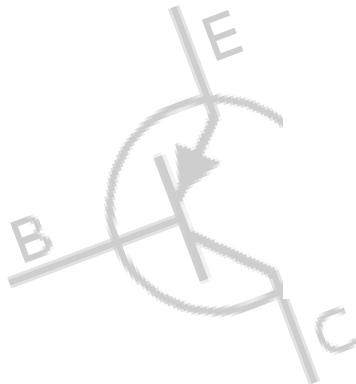


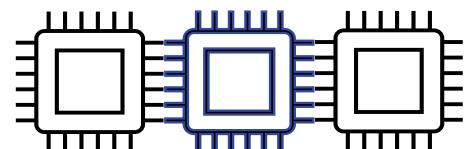
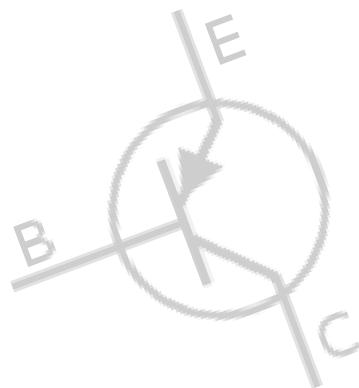
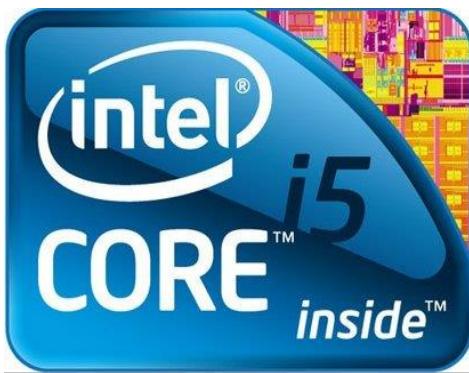
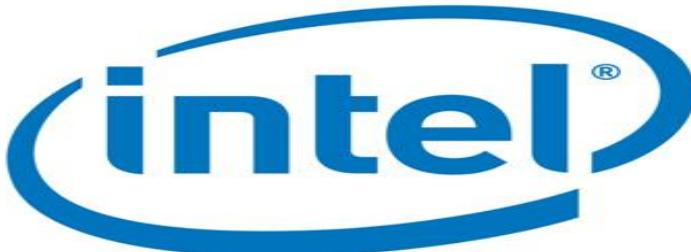
## Número de Transistores

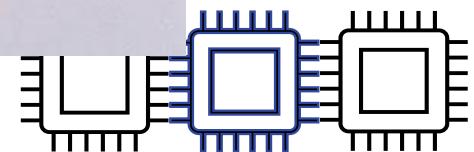
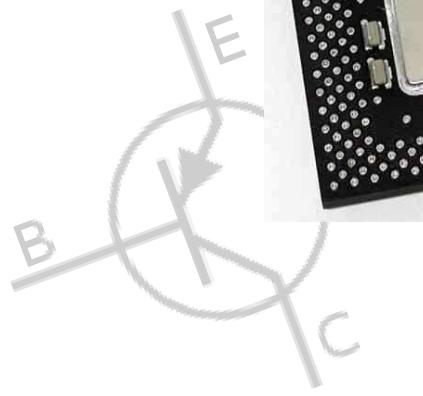
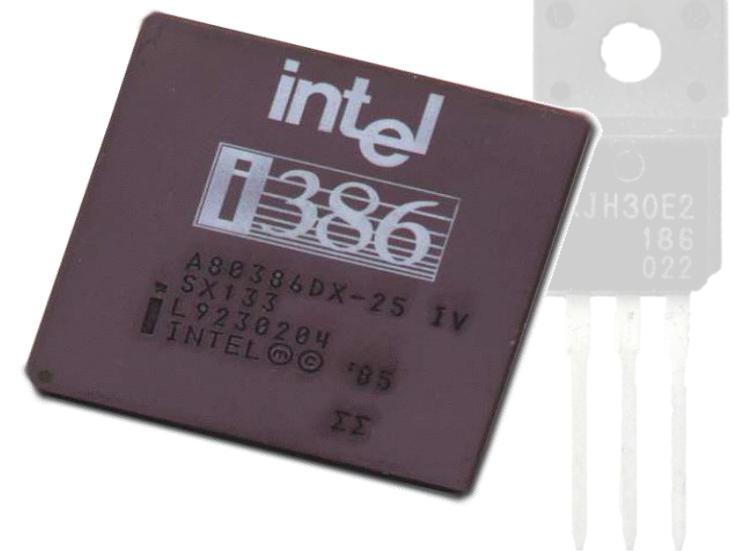
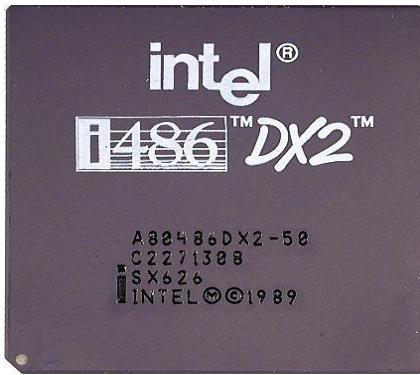


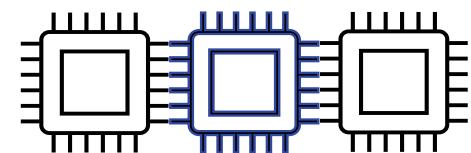
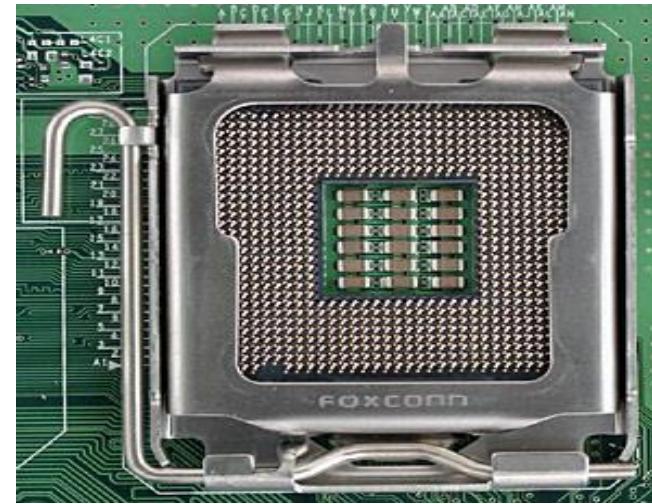
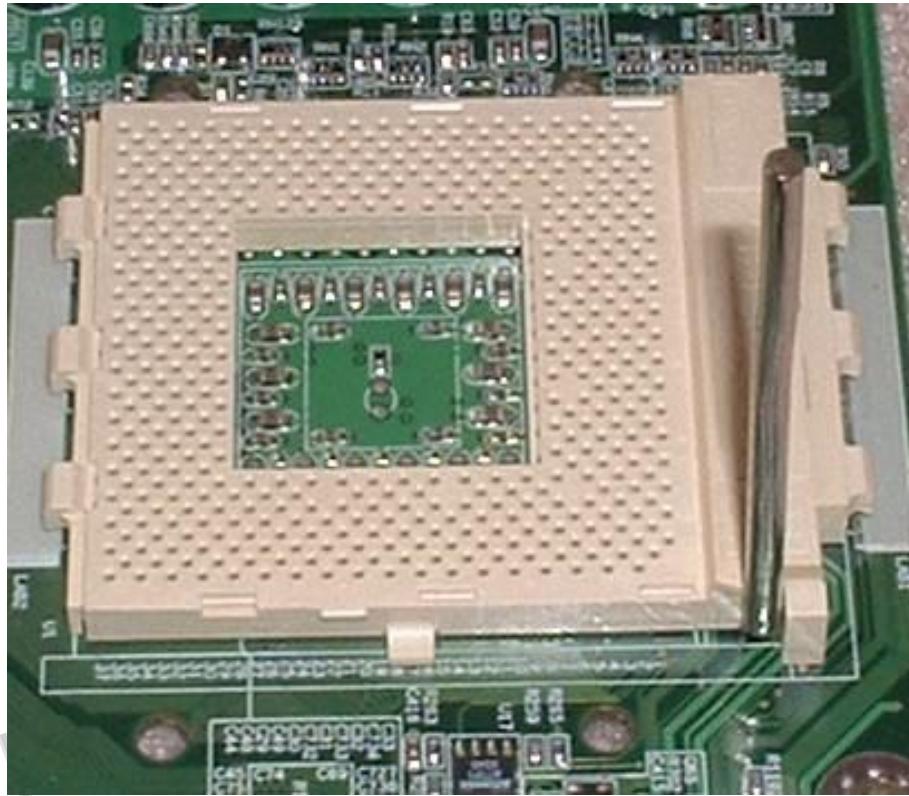
# Fabricantes

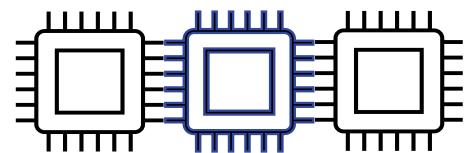
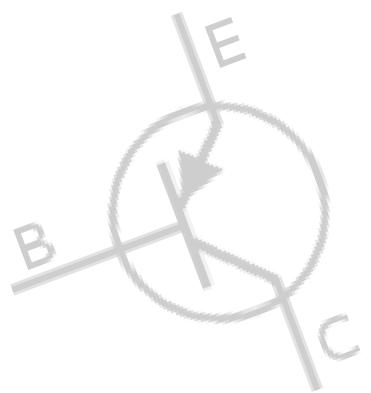
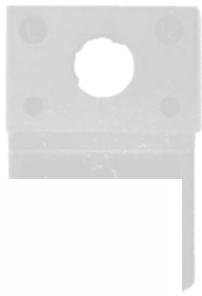


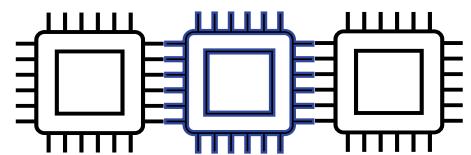
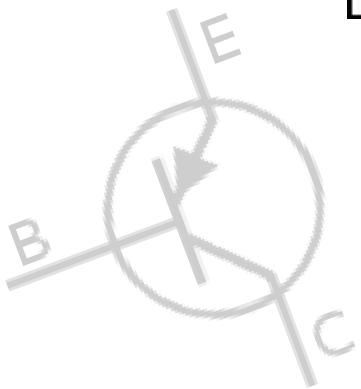
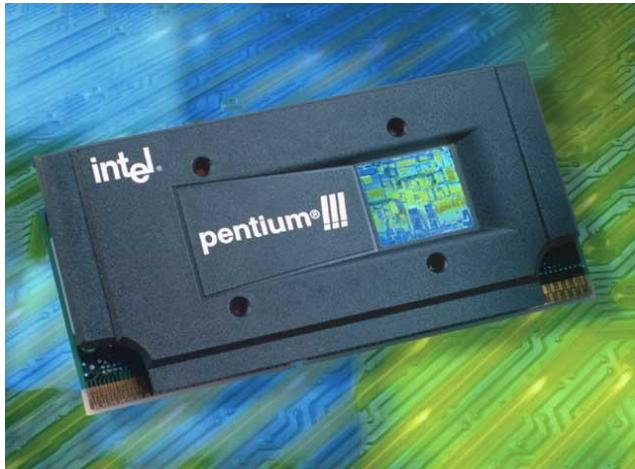


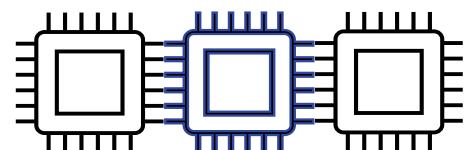
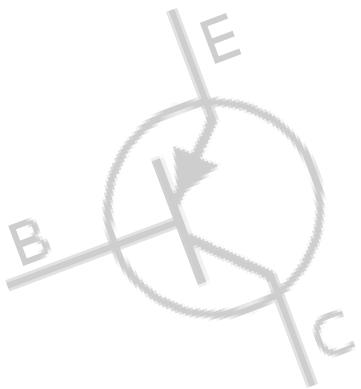
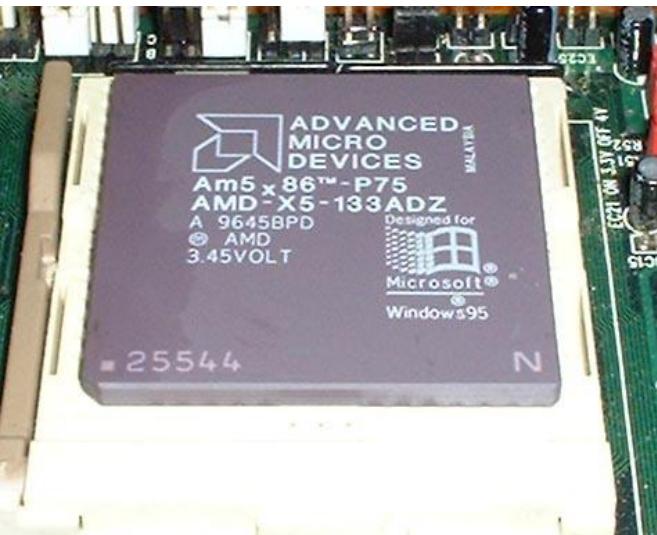


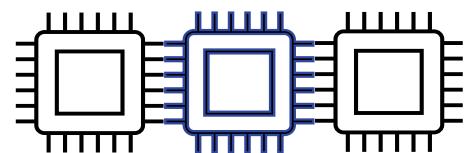
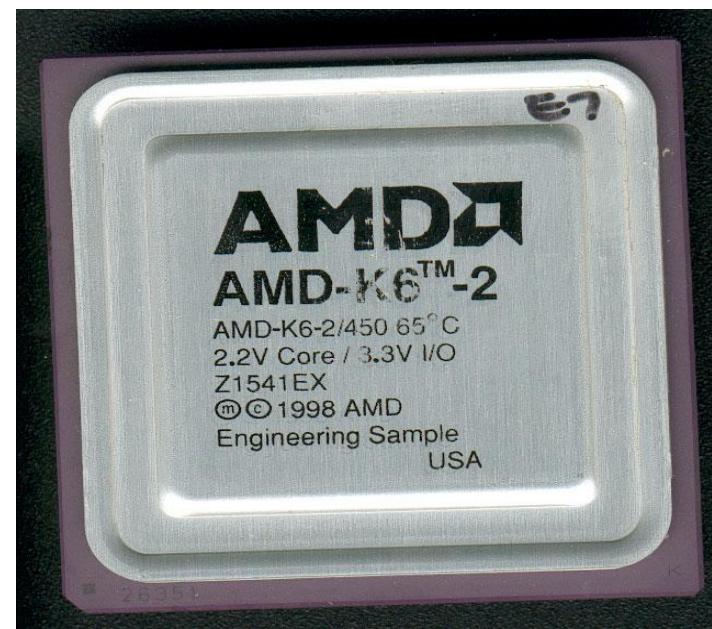
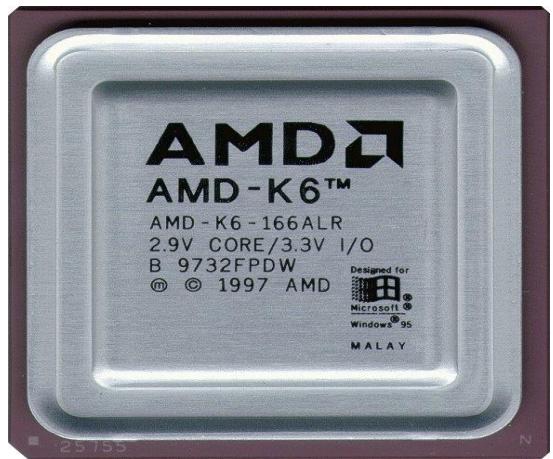


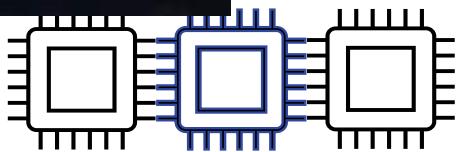
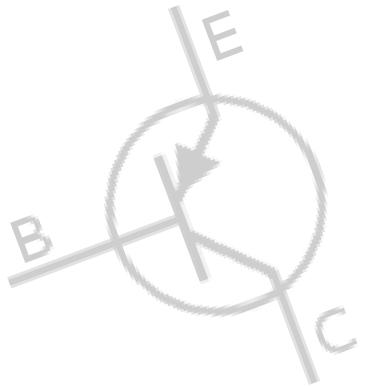


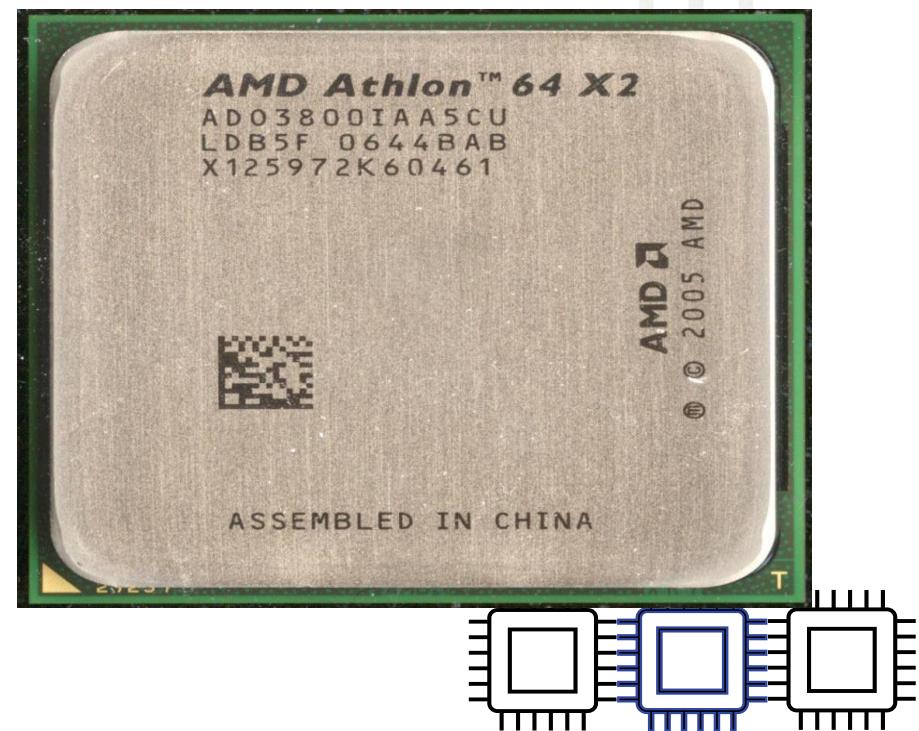
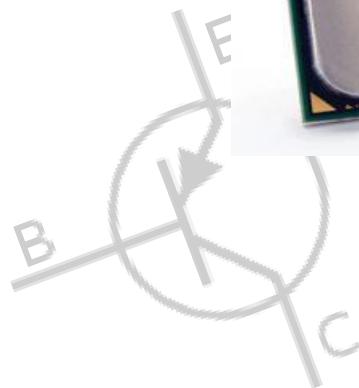






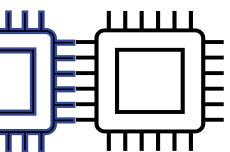


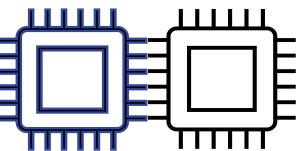




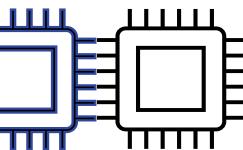
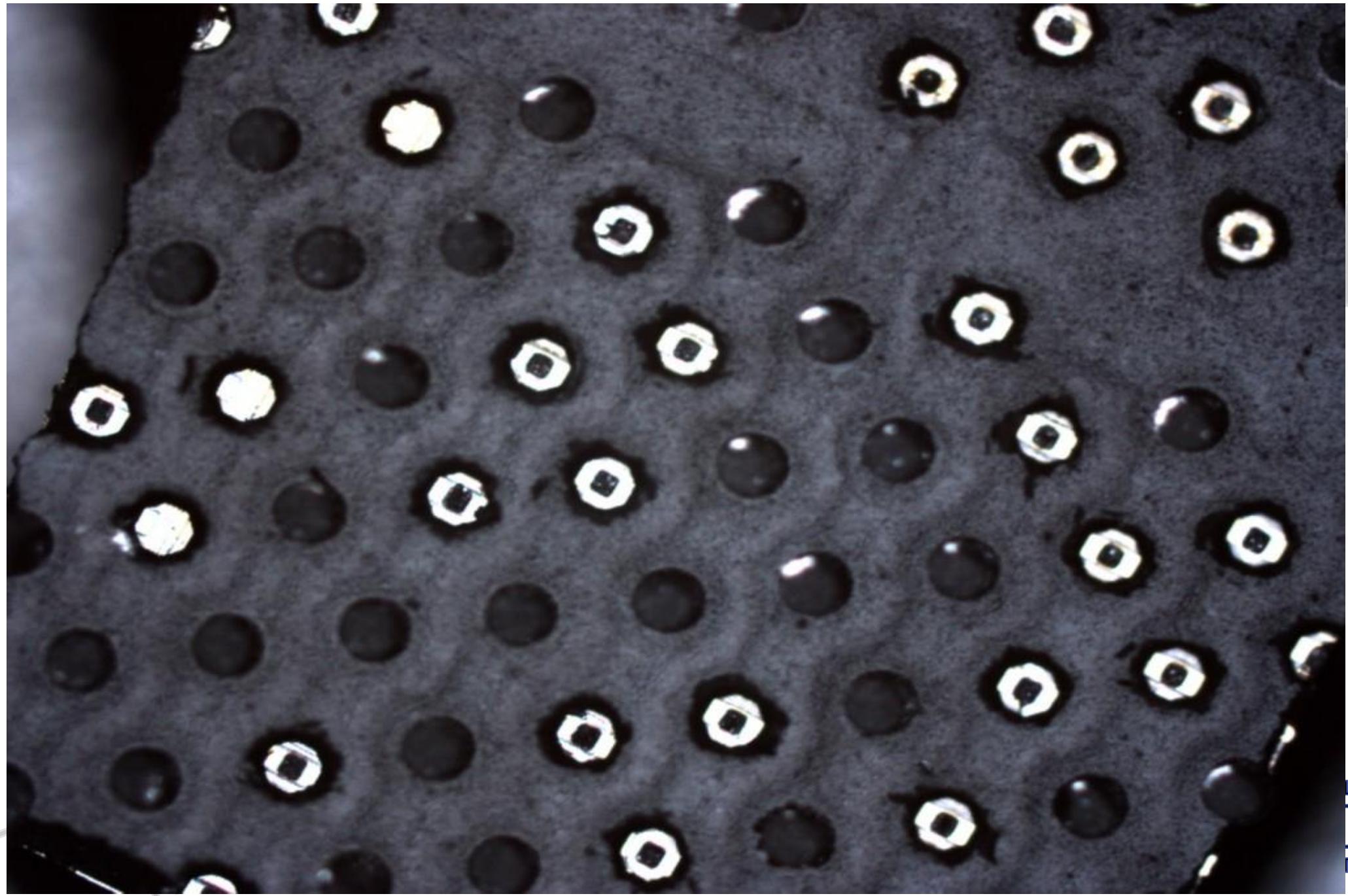


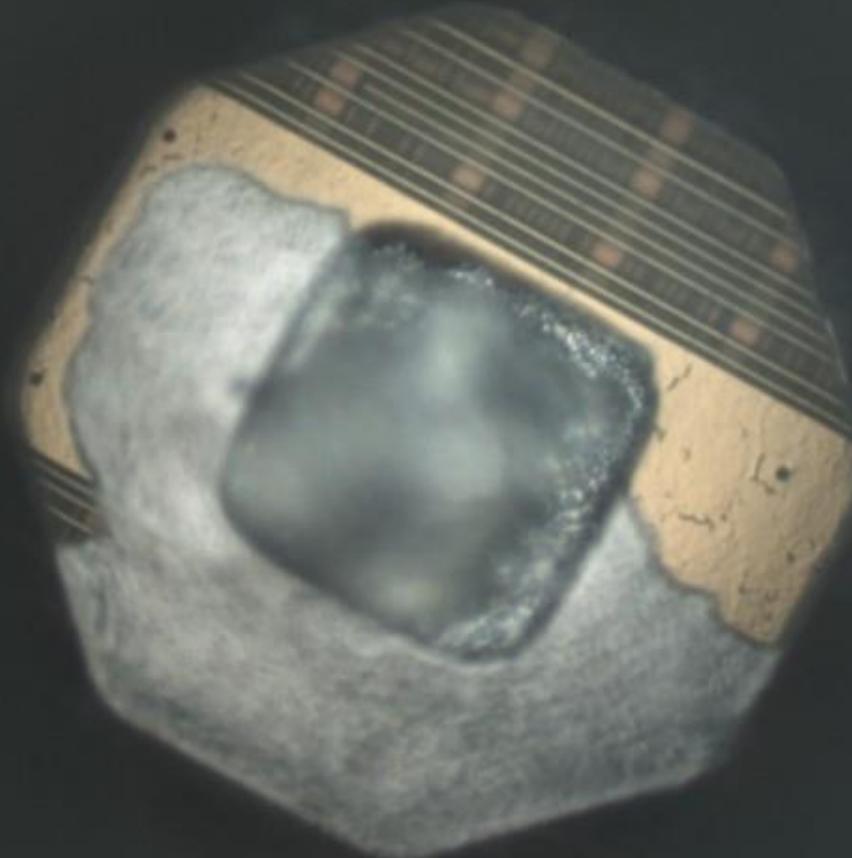
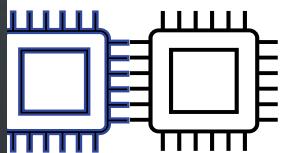
P  
30E2  
186  
022

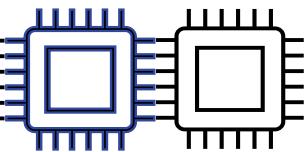
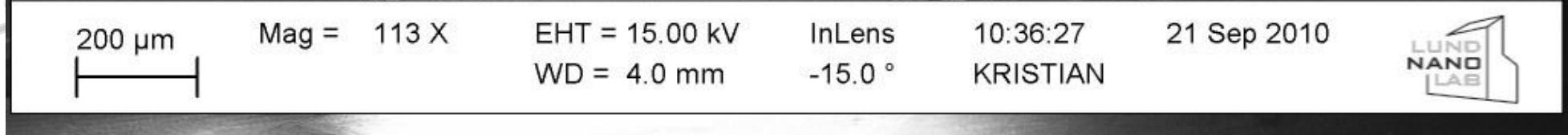
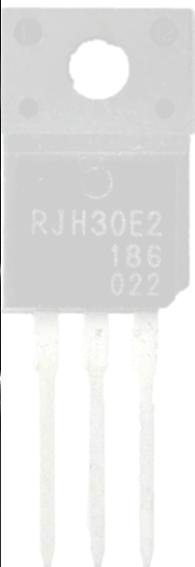
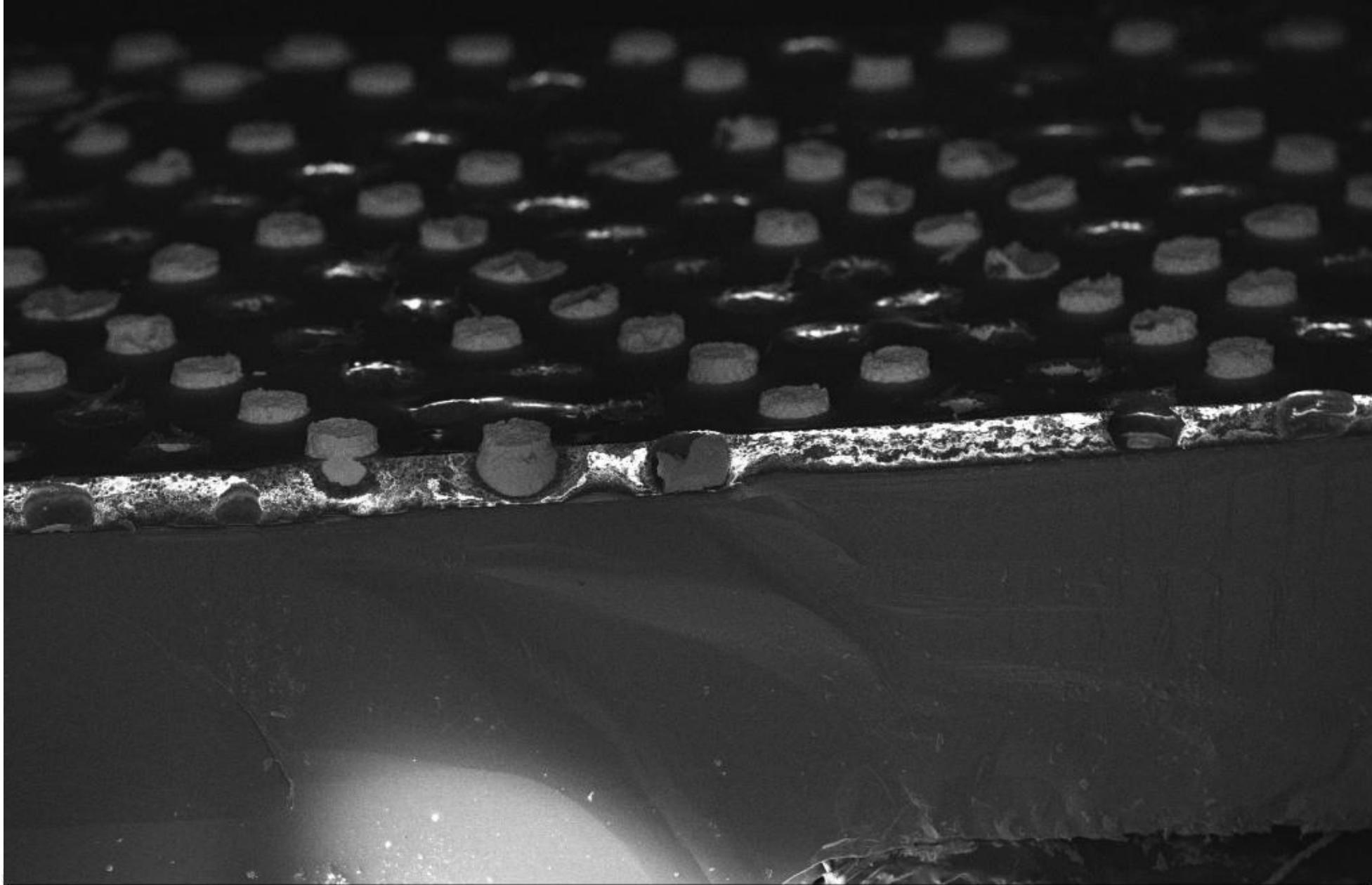


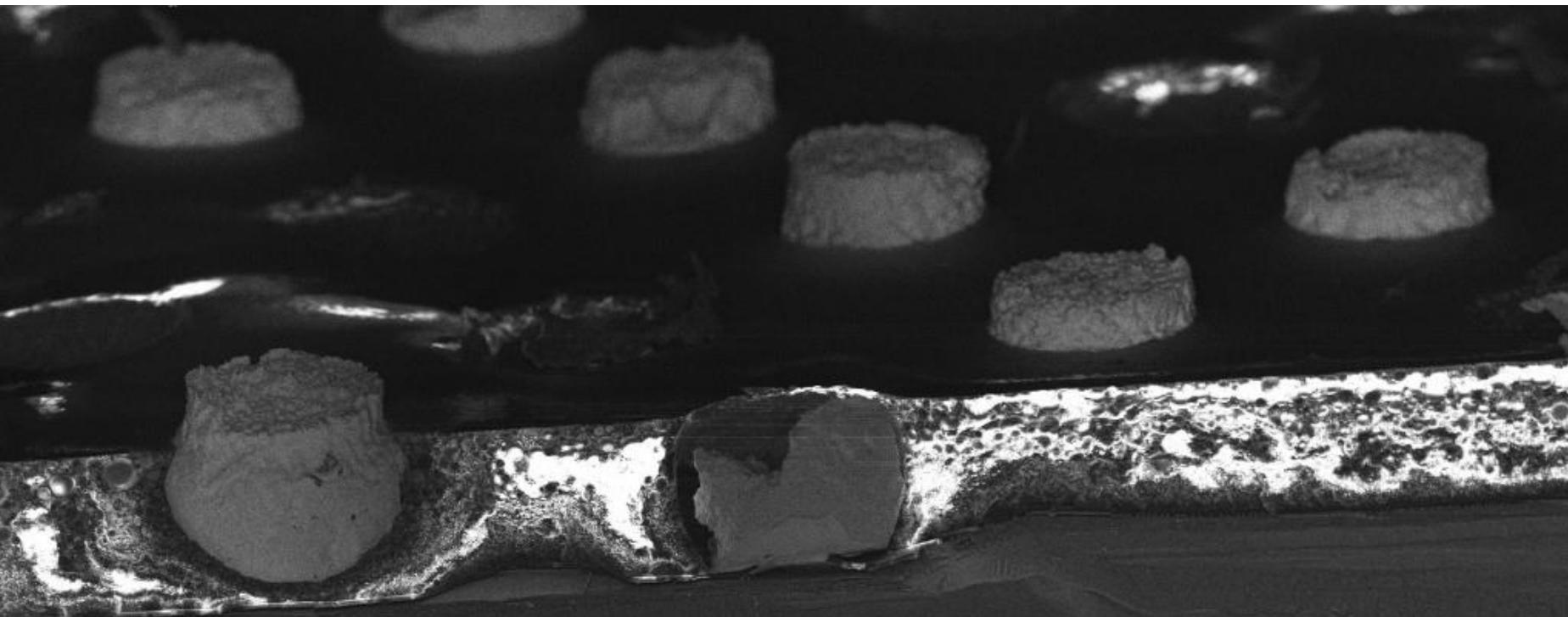




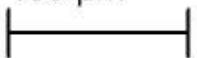








100 µm



Mag = 283 X

EHT = 15.00 kV

WD = 4.0 mm

InLens

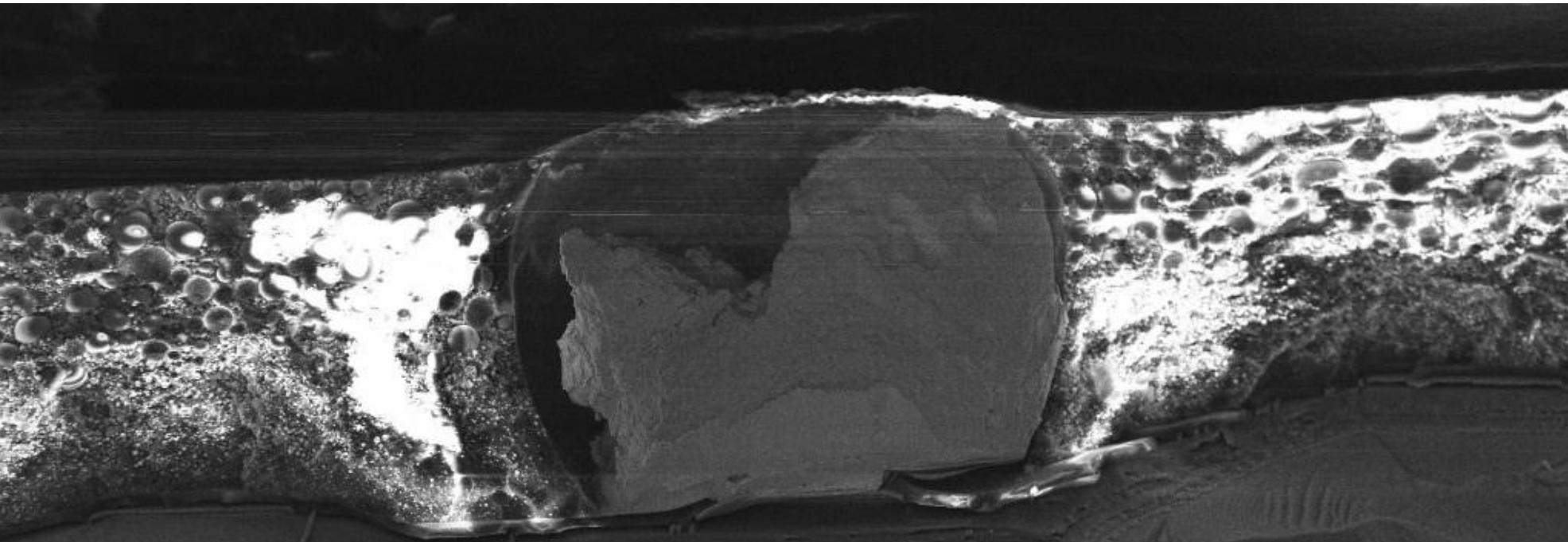
-15.0 °

10:36:05

KRISTIAN

21 Sep 2010





B  
X  
E

100 µm

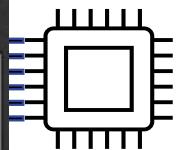
Mag = 678 X

EHT = 15.00 kV  
WD = 4.0 mm

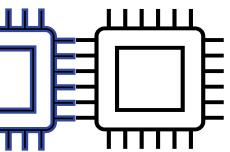
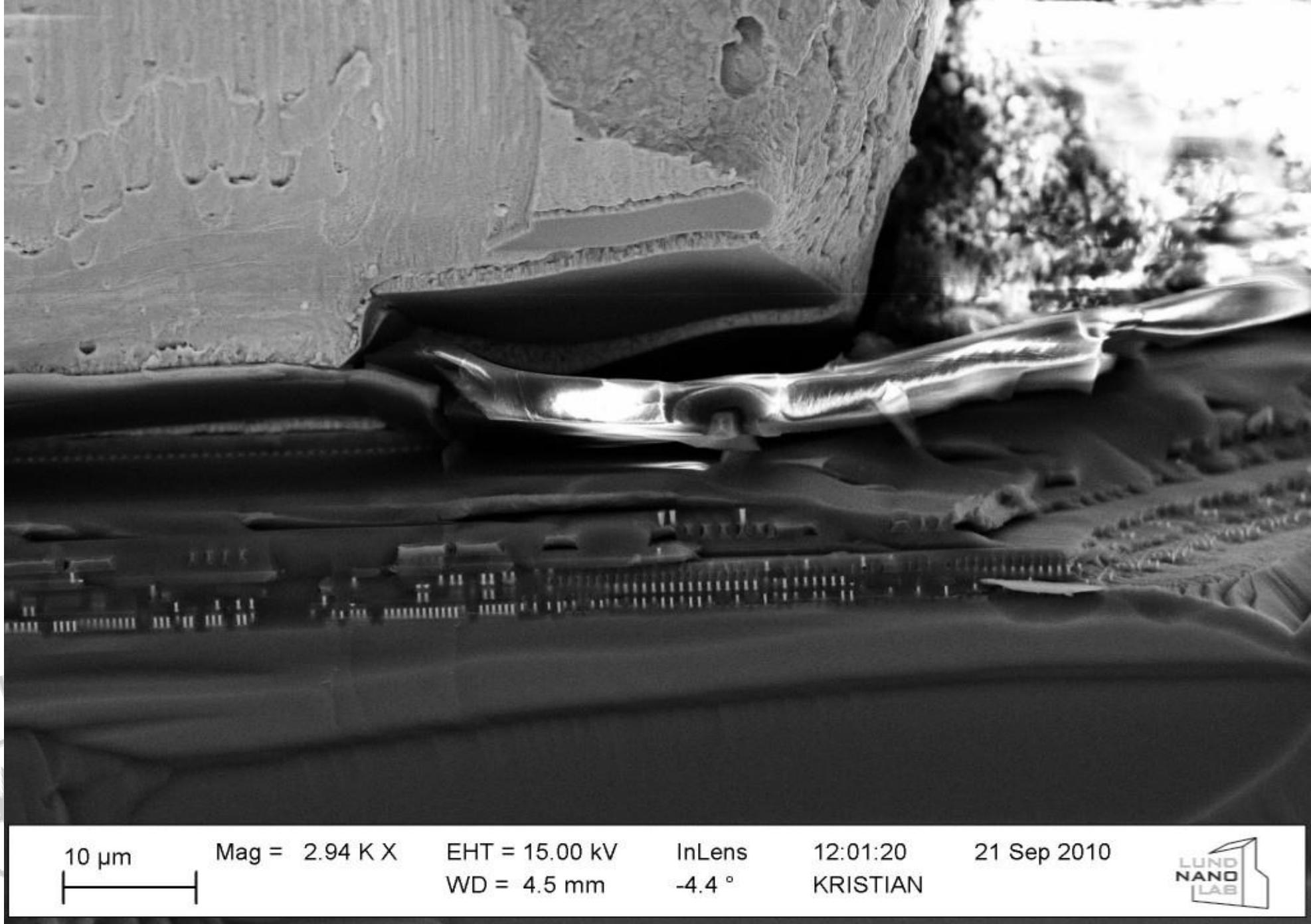
InLens  
-15.0 °

10:35:42  
KRISTIAN

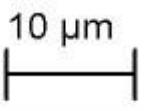
21 Sep 2010



B



B  
W



Mag = 1.82 K X

EHT = 15.00 kV

WD = 2.5 mm

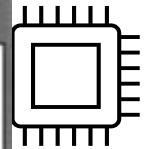
InLens

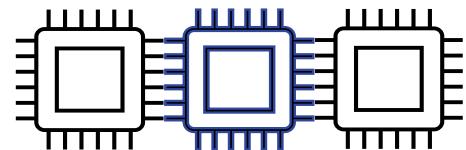
46.8 °

11:24:25

KRISTIAN

21 Sep 2010

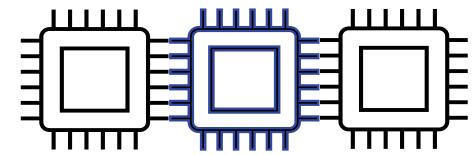




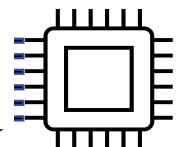
# OverClock

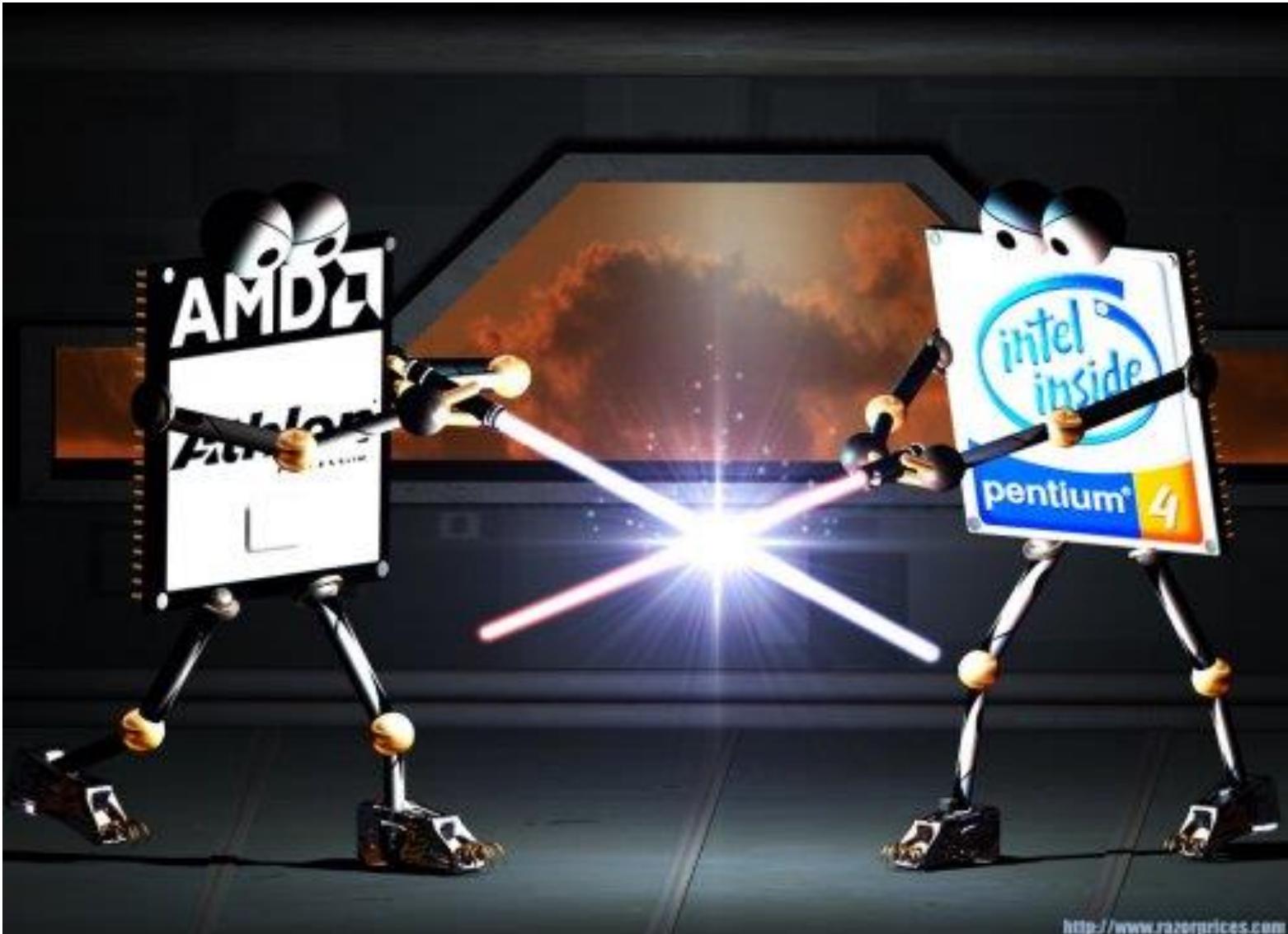
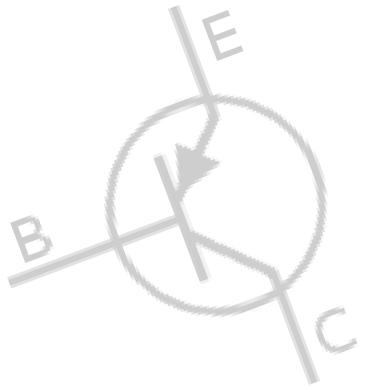


B  
C



# Cooler





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