Arquitectura del PC

Fermín Sánchez, Josep-Llorenç Cruz, Agustín Fernández, David López

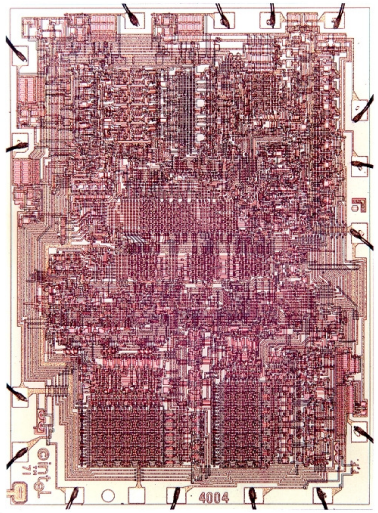
Departament d'Arquitectura de Computadors
Facultat d'Informàtica de Barcelona

Contenido:

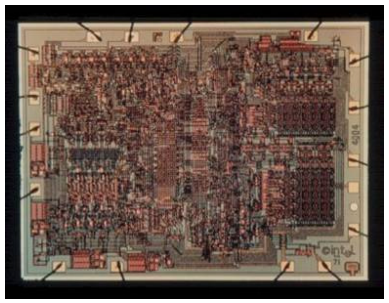
- **Intel Processors Die**

Índice

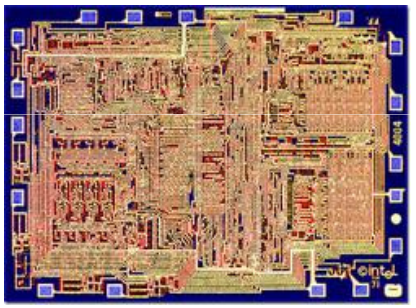
4004



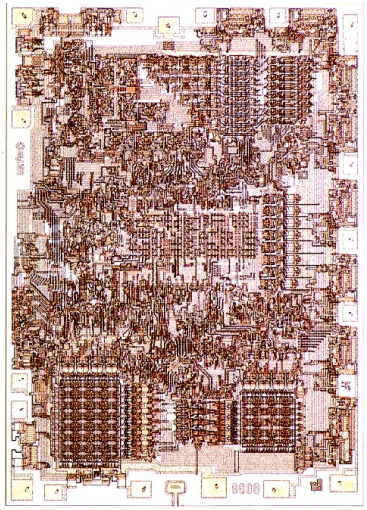
1971, 4 bits (bus de datos)
12 micras
2300 transistores
0,75 MHz



4004



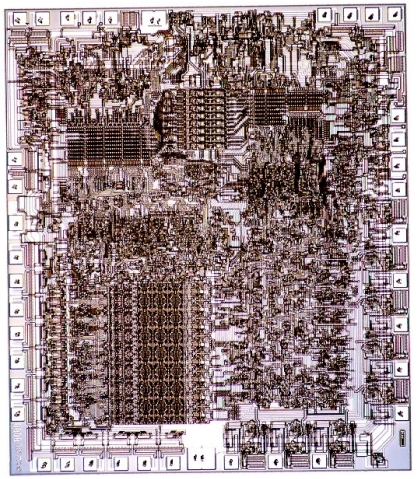
8008

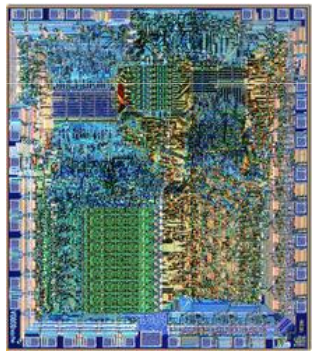


1972, 8 bits
10 micras
3500 transistores
0,75 MHz
2 x 4004

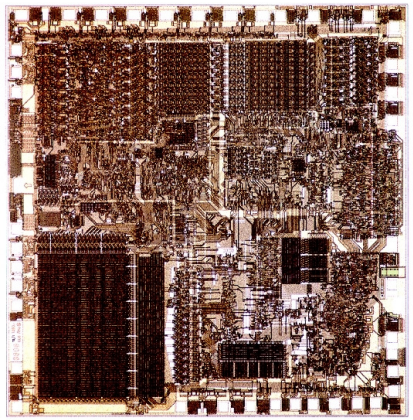
8080

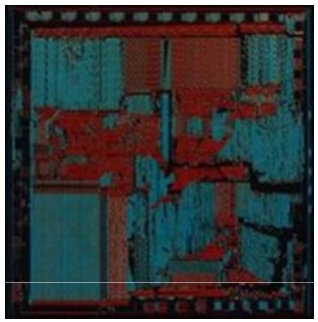
1974, 8 bits
6 micras
6000 transistores
2 MHz
10 x 8008





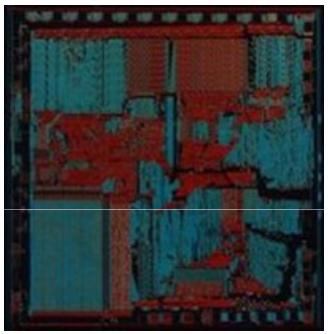
8086





1978, 16 bits
3 micras
29000 transistores
4,77-10 MHz
8 x 8080

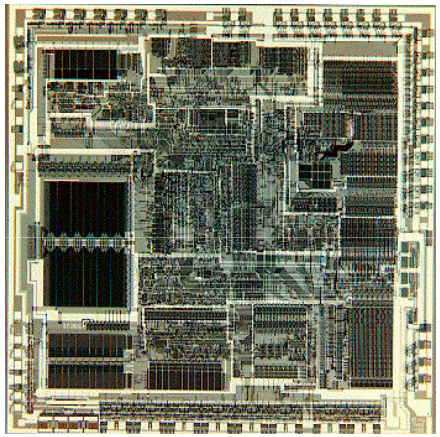
8086 - 8088

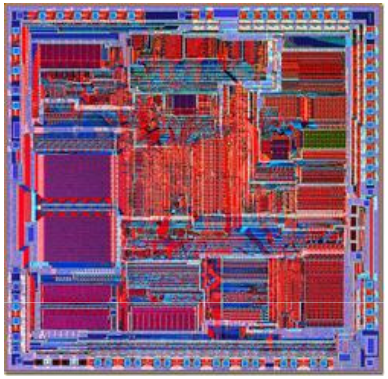


8086

8088

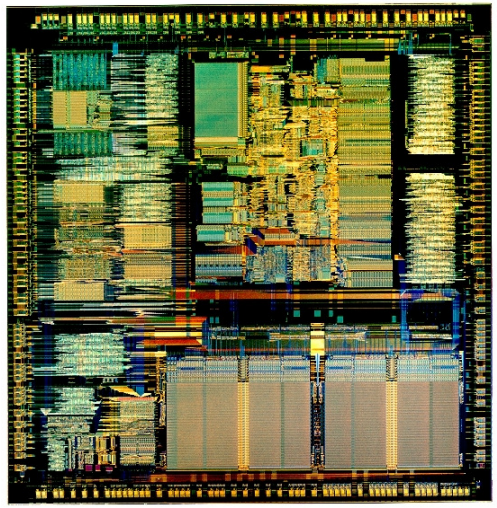
80286





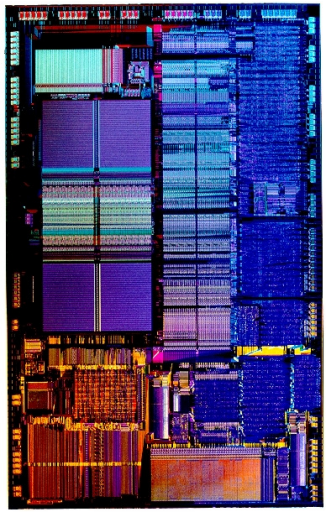
1982, 16 bits
1,5 micras
134000 transistores
8-12 MHz
4 x 8086

80386-DX



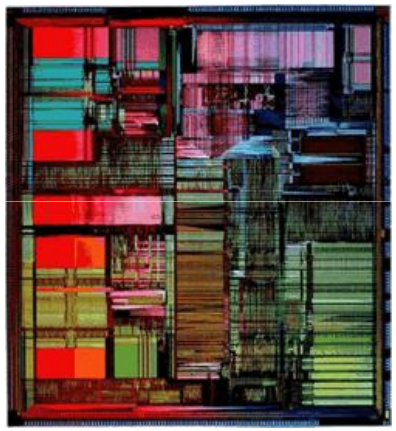
1985, 32 bits
1 micra
275000 transistores
16-33 MHz
2,5 x 80286

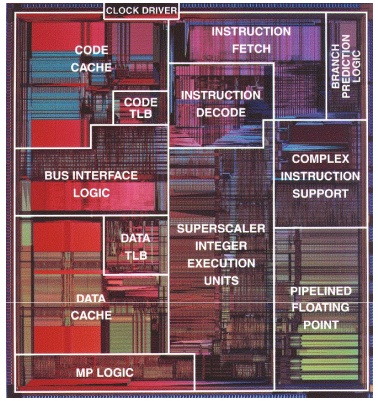
80486-DX



1989, 32 bits
0,8 micras
1,2 Mtransistores
25-50 MHz
2,5 x 80386DX

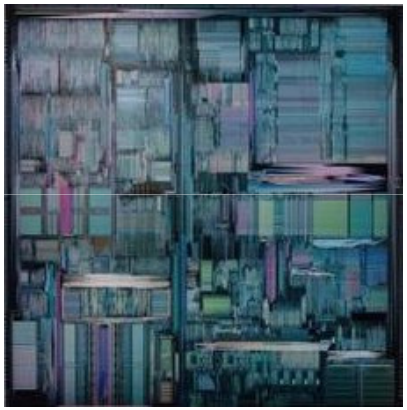
Pentium

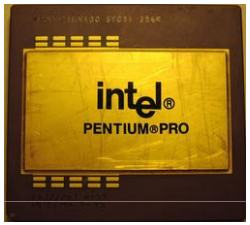




1993, 64 bits
0,8 - 0,35 micras
3,1 Mtransistores
60-200 MHz
5 x 80486DX

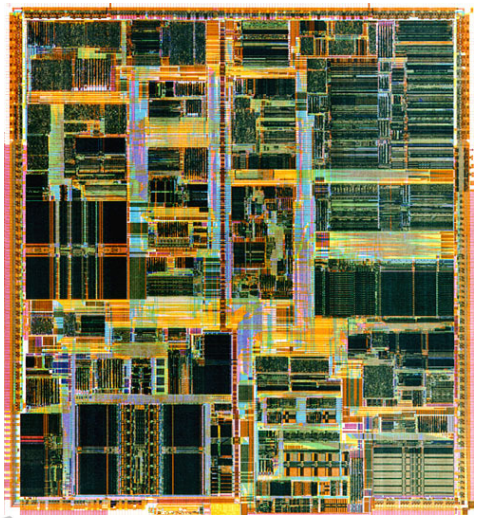
Pentium Pro





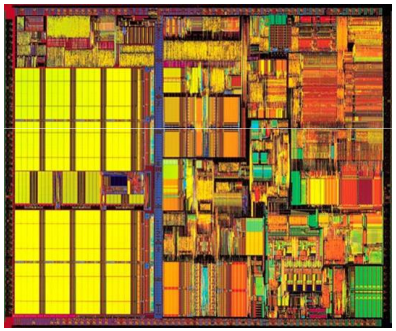
1995, 64 bits
0,6 - 0,35 micras
5,5 Mtransistores
150-200 MHz

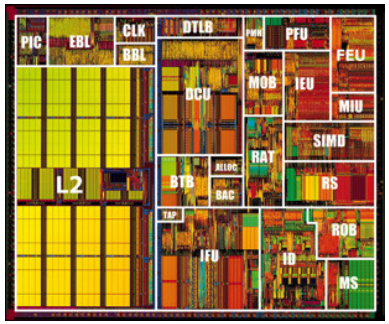
Pentium II



1997, 64 bits
0,35 – 0,25 micras
7,5 Mtransistores
233-450 MHz
4 x Pentium

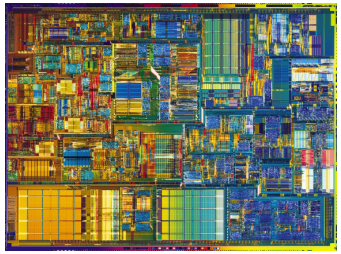
Pentium III 0,18 micras

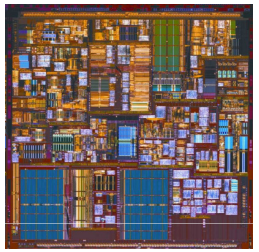


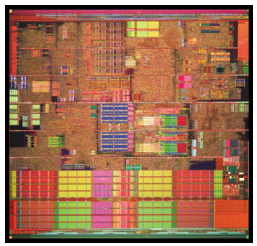


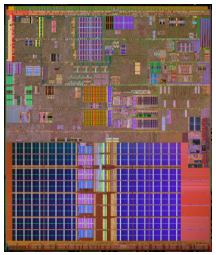
1999, 64 bits
0,25 – 0,13 micras
8,2 – 28,1 Mtransistores
450 – 1000 MHz
2 x Pentium II

Pentium 4



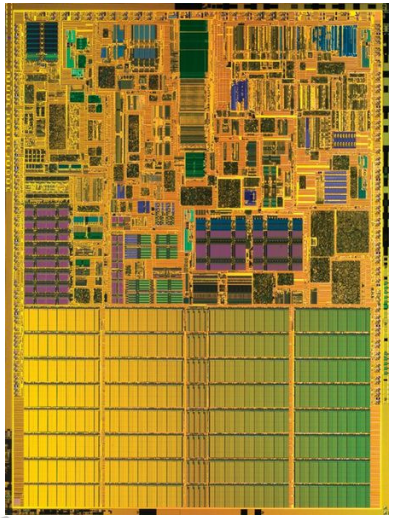


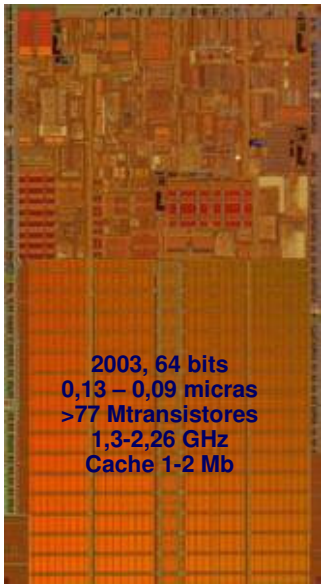




2000, 64 bits
0,18 – 0,09 micras
>55 Mtransistores
> 4000 MHz
3 x Pentium III

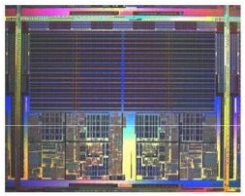
Pentium M



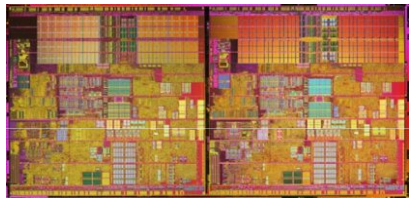


2003, 64 bits
0,13 – 0,09 micras
>77 Mtransistores
1,3-2,26 GHz
Cache 1-2 Mb

Dual Core

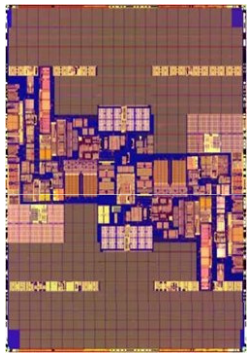


AMD Dual Core
Opteron
2006, 64 bits
0,09 micras
1,8-2,22 GHz
Cache 1 Mb L2



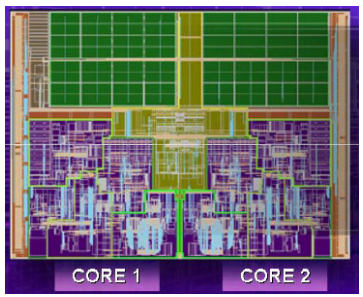
Pentium EE
Dual Core
Prescott
2006, 64 bits
0,09 micras
Cache 2 x 1 Mb

Dual Core

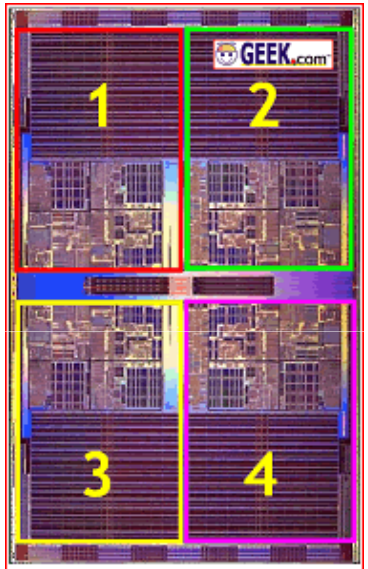


Montecito

Intel Dual Core
2006, 64 bits



Quad core



What a quad-core "Athlon X4" processor die might look like.

Bibliografía

- www.intel.com
- www.science.widener.edu
- www.cpu-collector.com
- www.icknowledge.com/trends/uproc.html
- www.happytrees.org/main/me/intel.html
- www.google.es