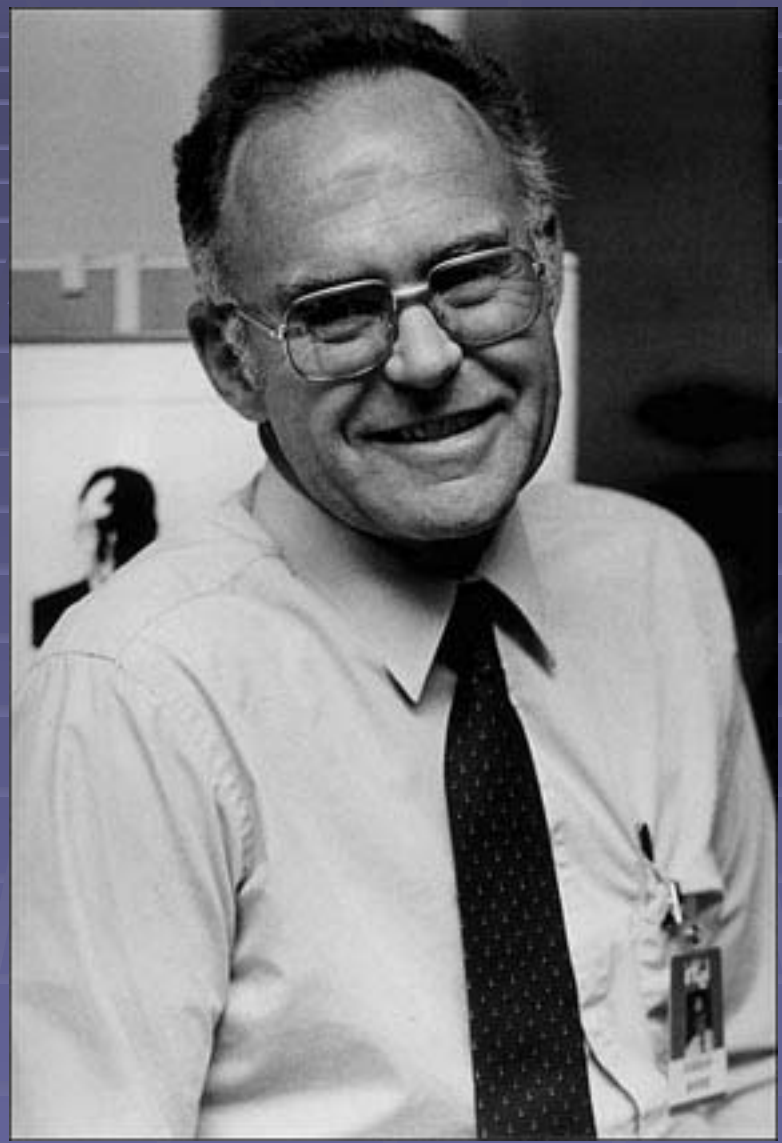
Gordon E. Moore



Background

- Born in San Francisco CA
- Early interest in chemistry

"I got interested in chemistry. My next door neighbor got a chemistry set for Christmas. I started playing with him and that set. In those days you got really neat chemicals in the chemistry set. You could make explosives and a variety of things."

- Received B.S. from U.C. Berkeley in Chemistry - 1950
- Later received Ph.D. from Caltech in Physics and Chemistry -1954

Professional Life

- Applied Physics Lab- 1953

"I guess, by inclination, I was more of an engineer than a scientist in that having some practical outcome from what I did was important. With my chemistry set, I had to get a good explosion at the end or I wasn't happy."

- Shockley Semiconductor- 1956

- Left with 7 others to found Fairchild Semiconductor- 1957
  (Director of Research and Development)

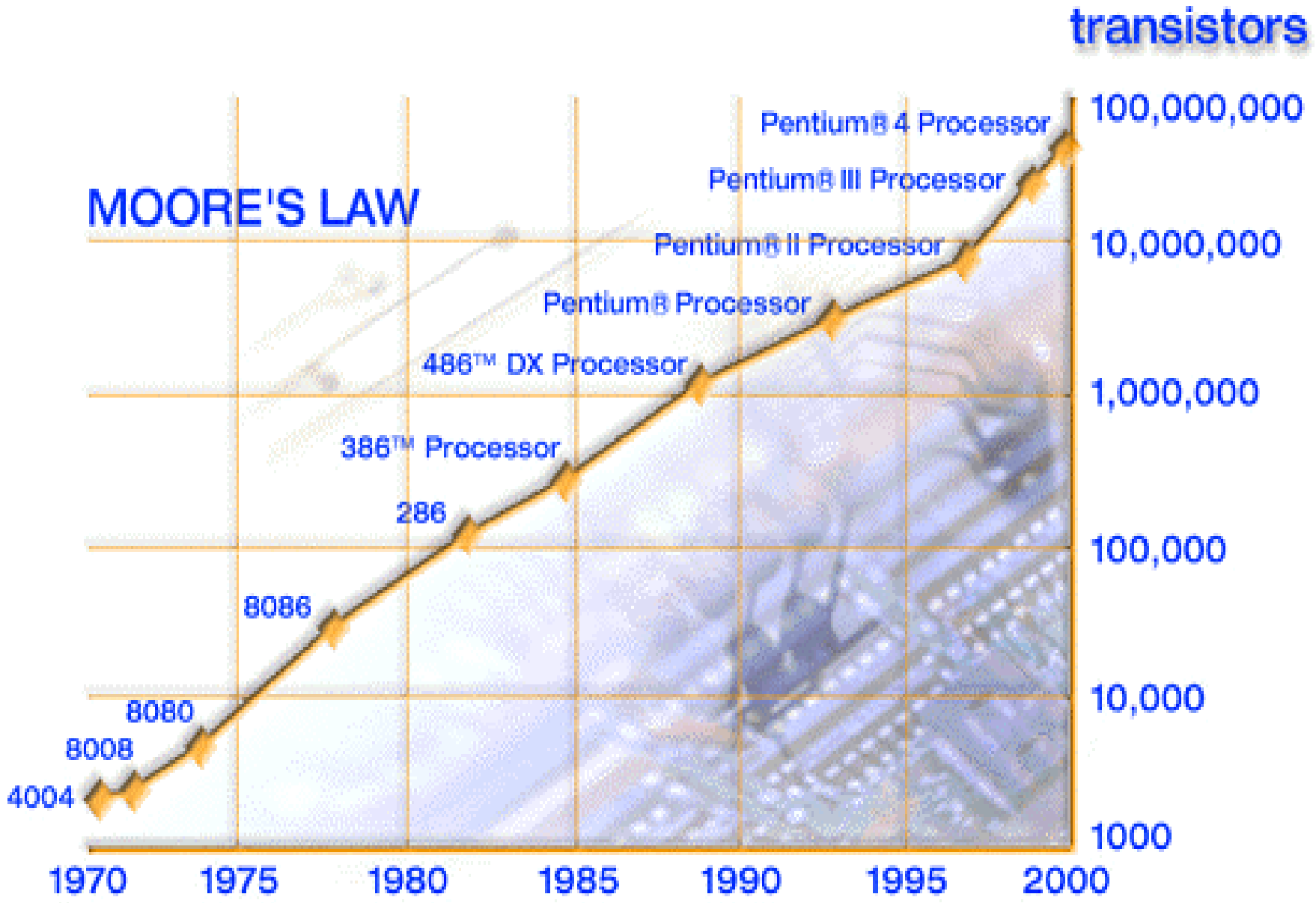
Moore's Law

- April 19, 1965 *Electronics* magazine

"The complexity for minimum component costs has increased at a rate of roughly a factor of two per year. Certainly over the short term this rate can be expected to continue, if not to increase." (Moore 1965)

- 1975 IEEE International Electron Devices
  - Prediction changed from doubling yearly to doubling every 18 months.

"Going forward from here we have to depend on the two size factors - bigger dice and finer dimensions." (Moore 1975)


transistors
MOORE'S LAW
Pentium® 4 Processor
Pentium® III Processor
Pentium® II Processor
Pentium® Processor
486™ DX Processor
386™ Processor
286
8086
8080
8008
4004
100,000,000
10,000,000
1,000,000
100,000
10,000
1000
1970
1975
1980
1985
1990
1995
2000

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- Co-founded Intel with Robert Noyce- 1968

- CEO of Intel- 1979-1987

- Now Chairman Emeritus of Intel and major philanthropist

How long will Moore's Law continue?

- "I think we've got two or three more generations, moving in the same path we've been on. Then we'll have to change."
- "The thing that's been driving it …is the ability to make things smaller and smaller, and eventually the fact that the materials are made of atoms is a real limit…It will slow down."

(Interview, PC World, July 16, 2003)