



# Robert Noyce

Early Career



**I've always liked to be in the middle  
of a changing environment. There's a real  
challenge in making it all work.**

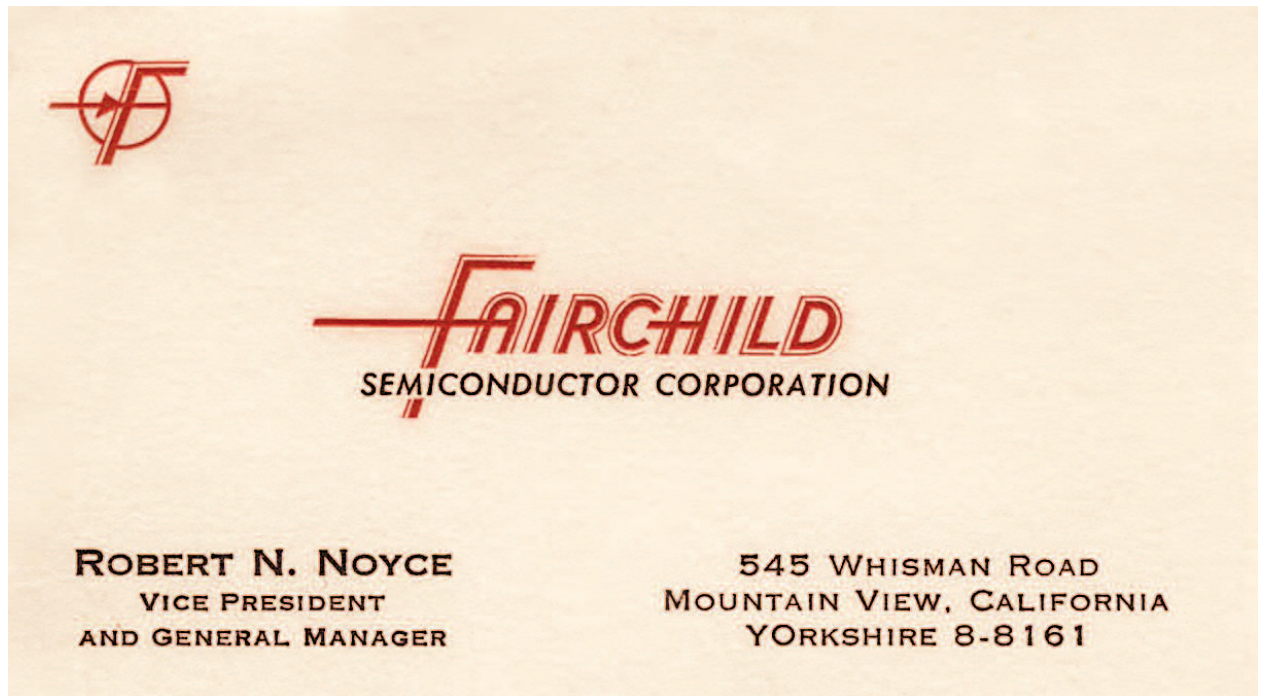
**Robert Noyce  
Touchstone IPTV-Iowa, 1987**



Copyright © 2005 Intel Corporation

Armed with a Ph.D. in physics from MIT, Noyce started his career doing transistor research at Philco in Philadelphia in 1953. Three years later, he accepted an offer from William Shockley, one of the inventors of the transistor, to move to California to work at start-up Shockley Semiconductor Laboratory. In this 1956 photo, Noyce (center, back row) and colleagues toast Shockley (seated at head of table) upon learning that Shockley had won the Nobel Prize for Physics.

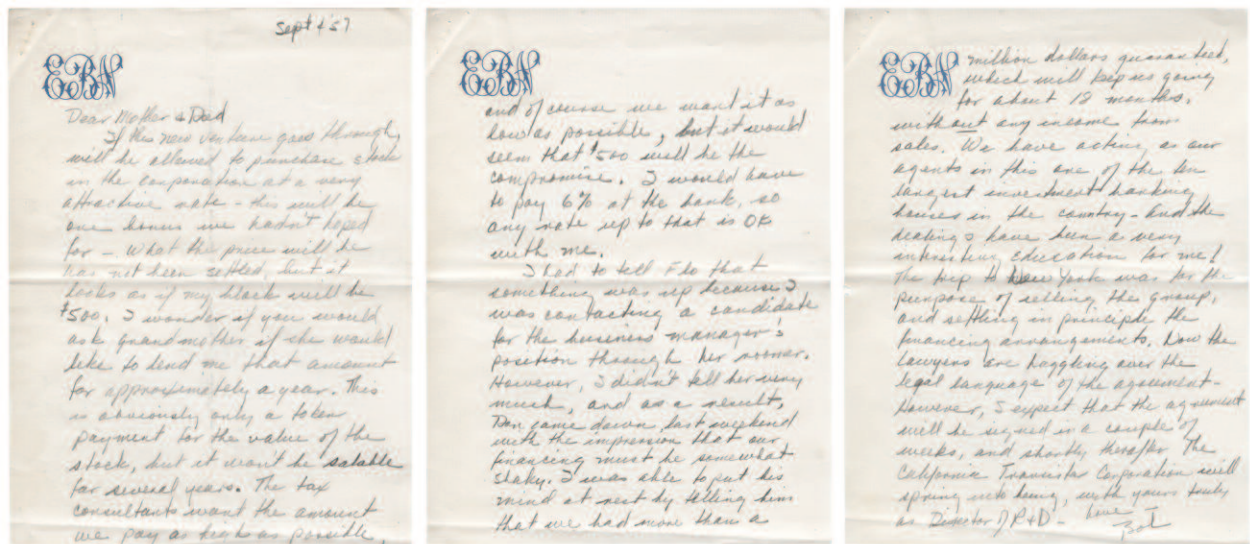
**Robert Noyce** Early Career



Copyright © 2005 Robert Noyce Family

Robert Noyce business card Fairchild Semiconductor Corporation.

## Robert Noyce Early Career



Copyright © 2005 Robert Noyce Family

Part of Fairchild Semiconductor's original financing deal required a \$500 investment from each of the eight founders. Lacking personal savings, Noyce wrote to his parents, asking them to inquire if his grandmother, the only family member with reserve funds, could lend him the money. Noyce's wealth grew along with Fairchild's success over the next few years, and he paid his grandmother back with interest.

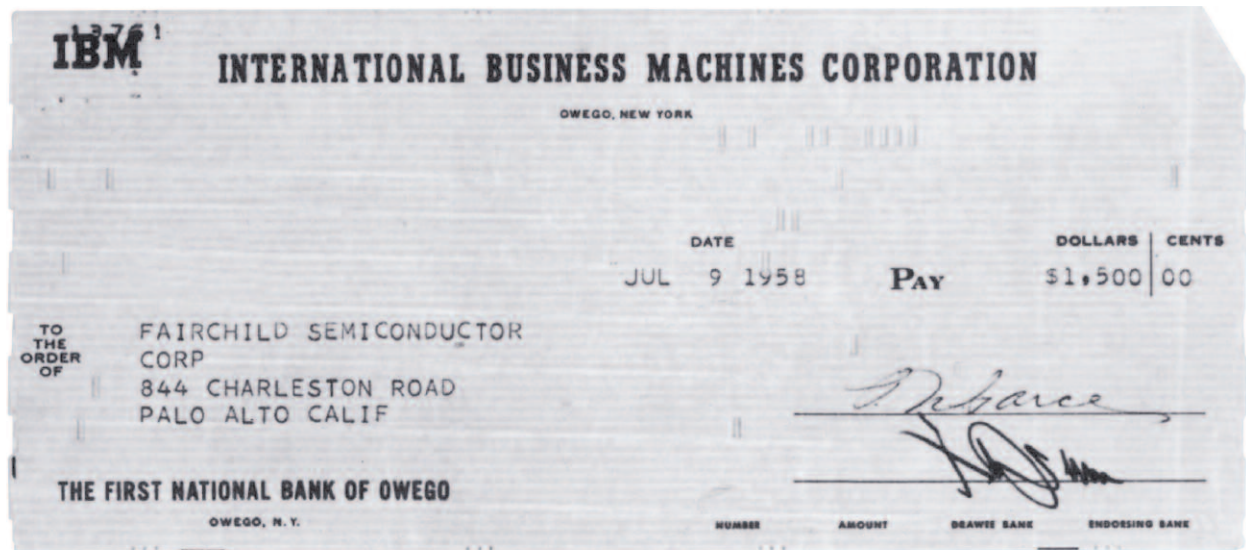




Copyright © 2005 Intel Corporation

Noyce was one of eight men who left Shockley Semiconductor and founded Fairchild Semiconductor, an expansion of New York-based Fairchild Camera and Instrument, in 1957. The "Fairchild Eight" included (left to right) Gordon Moore, C. Sheldon Roberts, Eugene Kleiner, Bob Noyce, Victor Grinich, Julius Blank, Jean Hoerni, and Jay Last.

**Robert Noyce** Early Career



Copyright © 2005 Robert Noyce Family

Fairchild Semiconductor made its first sale to IBM — an order for transistors at \$150 each.

## Robert Noyce Early Career



Copyright © 2005 Intel Corporation

Noyce (right) speaks to the other Fairchild founders in the company's production area. Although he was a senior manager at Fairchild, Noyce also remained a technologist; 11 of the patents that carry his name were filed during his years at Fairchild.



## Robert Noyce Early Career

Thursday evening.

Dear Bob -

We keep thinking about you in this period of change and being so grateful that you took time to come up to be with Don & R.H. and us for supper.

And now Monday. And we have a card from Betty ~~saying~~ saying

Bob is having a harrowing time, but will come out all right in long run, and that Penny is saying that she is having the happiest summer in her life. Then we were with Flo at Treasure Island honoring Buswell's daughter Margaret and her husband, here for a few days, and Flo passed over a card from Betty saying "Well get into the Maine coast cottage August 5". So Betty's home on the coast is a reality, if even for so small a part of the summer, that is left by then.

I keep realizing today that your office is at home for the present. What a lot of thinking about the future and dreaming and playing with a lot of ideas you must have done already. It is a courageous step. I guess I said that in a way and Bettie's comment in the letter after Don wrote her and sent the zerox copies was the same "What courage!" And Don said that you would soon have to assemble an office staff of about 20/30 to get under way with any plan. Well, we have no conception of how you organize a start. I hope that it is exciting to you and in some way exhilarating, and that you don't feel pushed or hurried into organizing a company before you are ready.

What I would say over the phone is that if there is any time when you feel to come up for supper, we will be happy to have you call, and we will get Don over (Bettie et al come home the 21st or thereabouts). Of course R.H. is always glad to see you brothers. Do call us sometime.

Don and we called Gay and Dotey about an hour before they started for the airport. They were to land in Amsterdam Sun. AM at 9:45 and have a car waiting for them for their three weeks tour of the continent. One week they have a reservation in Brilon, West Germany, out from there to Koln and 2<sup>nd</sup> church center or two which I must visit, then south through the Romanischer Strasse Of medieval towns, perhaps to Switzerland before going to Paris for a few days. Dotey had had an OK on stomach and heart from the tests she was undergoing when you saw them. No news from R.H. It has been good to see Don a few times. But the import of all this is, "We are thinking of you, and wondering how life goes with you." Did you have to go to see the family this week? with love mother.

Copyright © 2005 Intel Corporation

Noyce's mother commented on his departure from Fairchild in a letter in July 1968, the same month he and Gordon Moore incorporated a new venture as NM Electronics, soon to be renamed Intel.