Chip History: **Intel's Birth**

May 1968: It was a sunny California day when two men met at a home on Loyola Drive in Los Altos. It would have looked like any weekend front-yard meet-up. Robert (Bob) Noyce had been mowing his lawn. Gordon Moore had just popped over. Yet it was more than just a simple chat. The decision from this unheralded day would change the course of semiconductor history.

Bob had already approached Gordon back in January with the question of spinning off a new company from Fairchild Semiconductor. Many others had already done this in what would come to be known as the 'Fairchild Brain Drain.' But Gordon declined, saying "No. I've got the best job in the industry."[1] This time would be different, as problems within and without Fairchild continued to mount. After sleeping on it, Gordon called Noyce the next day: Moore was in.

1968 was a year of troubling times for their company and country. Fairchild Camera and Instrument had been caught up in a recession that had started in 1967. It was bleeding badly. The country was undergoing protests against the Vietnam war, with assassinations of both Martin Luther King Jr and Robert Kennedy coming before the summer was over.

Fairchild, swamped with losses, was a wounded animal trashing around in search of quick cures. It would make the slow-death-inducing mistake of throwing out the known in favor of the new. They even recruited Noyce to hire a new CEO, Les Hogan from Motorola … effectively his replacement. East Coast management wanted someone older … more mature. Fairchild was throwing out the baby with the bath water … a baby that would spark a revolution in the semiconductor industry.

Noyce called Arthur Rock, who had brought together the funding for the 'Traitorous 8' to start Fairchild Semiconductor. According to Rock, Noyce "said 'We're going to leave. We need $2.5M to get started.' I said, 'Fine, let's do it.' "I thought they could do anything… I was never so sure of an investment in my entire life."[1]

Intel was initially funded without a business plan. Rock did put together a short flyer of a page-and-a-half. There would be a second round in late September to close out the $2.5. At this point, one investor did want to see a plan. So Noyce crafted a one-pager that revealed little. But it was a moot point, as the second round went in a day-and-a-half.[1]

The real equity was in the people, which is an age-old Silicon Valley proverb. Noyce and Moore knew what they wanted to do. The bet was on them. Their lack of a plan was a peek into the future: Extensive business plans were typically insisted on in the early days of Silicon Valley's VC community. But this requirement would be dropped by the 2000s and replaced with short elevator pitches in PowerPoint.

Intel's Business Plan

~June 1968

The company will engage in research, development, adn manufacture and sales of integrated electronic structures to fulfill the needs of electronic systems manufacturers. This will include thin films, thick films, semiconductor devices, and other solid state componenet used ih hybrid and monolithic integrated structures.

A variety of processes will be established, both at a laboratory and production level. These include crystal growth, slicing, lapping, polishing, solid state diffusion, photolithographic masking and etching, vacuum evaporation, film deposition, assembly, packaging, and testing, as well as the development and manufacture of special processing and testing equipmentrequired to carry out these processes

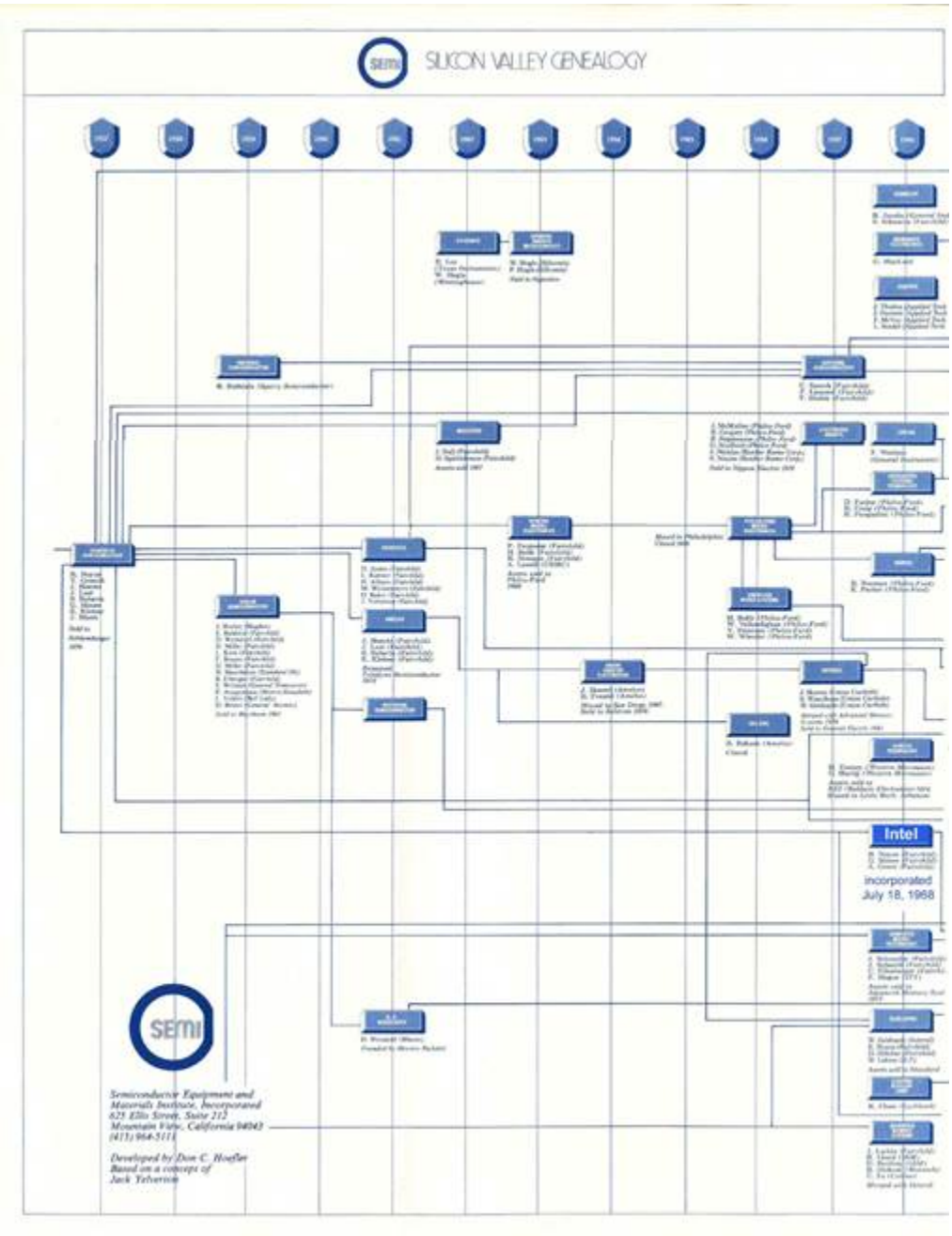
Products may include dioded. transistors, field effect devices, photo sensitive devices, photo emitting devices, integrated circuits, and subsysteme commonly referred to by the phrase "lagge scale integration" Principal customers for these products are expected to be the manufacturers of advanced electronic systems for communications, rader, control and data processing. It is anticipated that many of these customers will be located outside California.

What really made Intel different was not that it was a start-up. There had been many before. Moreover, 1968 would be a year in which start-up numbers would peak. There was little innovative here.

Nor were the differences in the name, which stood for **INT**egrated **El**ectronics, which would come later. The obvious name, MN Electronics, was quickly swapped out for NM Electronics. This is a good lesson in naming, as they had realized MN could be derided as 'More Noise' — always check your acronyms for alternative meaning. They had even worse names, for which the value may only be for trivia quizzes.

CALEX	California Electronics
ELCAL	Electronics of California
CALECOM	California Electronic Computer
ELCOM	Electronic Computer
CALCOMP	California Computer
DIGICOM	Digital Computer
TRONICOM	Electronic Computer
COMPTEK	Computer Technology
COMPUTEK	Computer Technology
ESSCOTEK	Electronic Solid Dtate Computer Technology
ECTEK	Electronic Computer Technology
DISTEK	Digital Solid State Technology

Eventually they would settle on Intel. Yet the real differences were under the hood. Intel the company was designed under a set of brilliant overlapping blue ocean strategies, which you'll see in the next part of this series.



Silicon Valley Genealogy Fairchild to Intel, Courtesy of SEMI. This is extracted from a full poster SEMI had commissioned to show the explosion of semiconductor start-ups in the valley. It was developed by Don C. Hoefler, often credited with creating the term "Silicon Valley."

1: A. Thackray, D. Brock, R. Jones; "Moore's Law: The Life of Gordon Moore," pages 272, 275, 281; Basic Books, 2015