The real story behind

How National Semiconductor ended up with Fairchild

Fairchild Semiconductor formed the beginning of the semiconductor industry itself, when it began 30 years ago. Because most of the industry entrepreneurs trained there, it was often dubbed the "University of Fairchild". Here's the story behind the decline of this once-great company, and its recent acquisition by National Semiconductor, from EA's US correspondent.

by PAUL SWART

For most of the past decade, Fairchild Semiconductor has been on the corporate operating table in a painful struggle for survival. On Monday August 31, 1987 Schlumberger, its current parent finally turned off the life-support system and sold the corpse to National Semiconductor for $US122 million in stock.

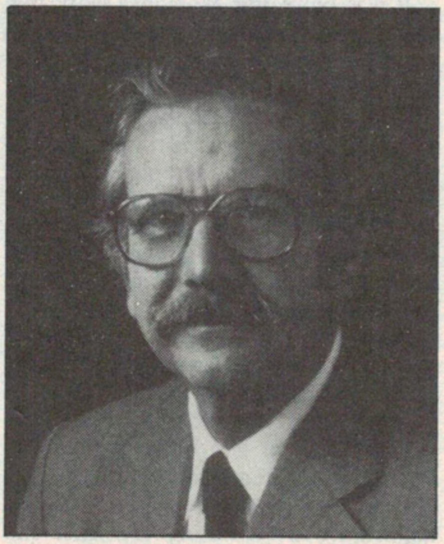
The deal ends the life of a company that founded the semiconductor industry 30 years ago when one of its founders, Robert Noyce, invented the integrated circuit.

Although Fairchild was Silicon Valley's leading chip manufacturer during the 1960s and early 1970s, the company also gained a reputation as the breeding ground for new semiconductor start-ups. Almost from its inception, Fairchild's management has been in a constant state of upheaval, causing many top managers to leave the company and form their own firms.

In 1979, at the annual forecast dinner of the Semiconductor Industry Association, keynote speaker Wilf Corrigan, a former Fairchild president himself, asked all those who had worked for Fairchild to stand up. Nearly three-quarters of the 700 chip executives present rose to their feet.

In time, the success of many of the spin-offs, including Intel and AMD, took its toll on Fairchild's performance as the company found itself playing catch-up with the innovations with which the spin-offs carved out niches for themselves. By 1978, Fairchild's growth came to a virtual complete halt, and even today's annual sales volume of some $US450 million is virtually the same as it was ten years ago. During the same period, the overall semiconductor market has grown at least eight-fold.

One of those Fairchild executives who left in disagreement was Charlie Sporck, who quit his job as general manager in 1967 to become president of National Semiconductor, a $US7-million company, then heading for bankruptcy.



National Semiconductor's president Charles Sporck, who will now be deciding the destiny of the company he left in 1967.

"I think Charlie made a hell of a deal," commented Corrigan, the LSI Logic chairman who was president of Fairchild when the company was sold to Schlumberger.

Even Schlumberger director Don Ackerman acknowledged that National got a great deal. "It is not a very substantial price. But then, the entity has been losing a substantial amount of money."

Surprisingly, most people reacted with relief when learning about the sale to National, a development that had seemed very unlikely just two weeks before. The relief compares to the outrage that erupted throughout the US when Japan's Fujitsu had agreed to purchase the company late last year for $US200 million.

The sale ends the two-year struggle by Schlumberger to get rid of the money-losing chip operation it bought in 1979 for $US456 million.

The rumours that Schlumberger was trying to sell Fairchild started shortly after the oil industry slipped into its crisis. Schlumberger's main business involves the leasing of oil drilling equipment. With oil prices plummeting to $US9-12 a barrel, oil drilling came to a near-complete standstill.

With its major business in serious trouble, Schlumberger no longer wanted to support its chip subsidiary. Since the acquisition in 1979, the French-based company had invested well over a billion dollars in R&D, new equipment and covering operational losses.

When Fairchild announced last Autumn that it had negotiated a sale to Fujitsu, US industry leaders, including Charlie Sporck expressed outrage.

Fairchild Semiconductor: the company from which most of Silicon Valley's chip entrepreneurs received their training then left to start up their own companies. In recent years it has been losing quite a lot of money — for example $US93 million in 1986.

Sporck told reporters he saw great danger in the sale to Fujitsu as it would give Fujitsu much easier access to the US market through Fairchild's marketing organisation. Because of the competitive nature of the Japanese industry, and the vulnerability of the US industry after two years of recession, he feared competitors of Fujitsu might try to match the move by buying a major American chip maker of their own.

In Washington, Defense Secretary Casper Weinberger also voiced his concern about the danger to the US supercomputer industry if Fairchild and its ECL business ended up in Japanese hands. Together with Commerce Secretary Baldridge, Weinberger called on the Reagan Administration to block the sale. Shortly afterwards, Schlumberger withdrew the offer to sell to Fujitsu.

At a crowded press conference at a Palo Alto hotel, Fairchild president Donald Brooks expressed his own outrage over what he saw as a ploy by his US competitors to sabotage the deal with Fujitsu. At the same time, Brooks said he would try to orchestrate a management-led leverage buy-out.

Early in 1987, it became known that Brooks had formed a consortium that included Fujitsu and Florida-based computer maker Integraph, as well as other outside investors. But early this summer, both Integraph and eventually Fujitsu pulled out of the deal. Industry observers said the continued huge losses generated by Fairchild scared off most of the investors.

During the next two months the efforts to sell Fairchild went into highgear. On the one hand, Brooks desperately tried to put a new package together that would leave Fairchild's independence intact. On the other hand, a parade of semiconductor and other companies, expecting Schlumberger to start selling Fairchild in bits and pieces, began to arrive at Fairchild, window-shopping for bargains on parts of the organisation they could use.

As valley observers started to place bets on which way the battle for Fairchild would turn out, Brooks managed to put a new package together, largely supported by venture capital from Citicorp. Brooks, after submitting the proposal on August 14, and confident he had saved Fairchild, took off with some friends on a salmon fishing trip. But before the fishing trip was half over, the take-over battle had heated up considerably, and Brooks, contacted by radio, returned to Cupertino on August 19.

When he returned, Brooks learned that National Semiconductor, and one other — unidentified — company had also submitted bids.

In particular the National entry had come as a surprise. National hadn't even expressed any interest in Fairchild until late June or early July. And it wasn't until late-July that National sent over a team of specialists to take a closer look at the company's operations. Even then several National executives played down the company's intentions.

But just before the deadline for submitting bids, National reportedly offered to pay $US122 million for Fairchild's logic and linear divisions, which accounts for 60% of the company's business.

Schlumberger, however, was not interested in selling just part of the organisation. Reportedly, Schlumberger ended up giving the entire Fairchild organisation to National for essentially the same price.

Even more surprising is that in selling to National, Schlumberger by-passed the Brooks-Citicorp offer, which was actually considerably higher than National's offer.

But National's offer was in the form of about 12 million shares of stock,

Fairchild

while the Brooks deal was based mostly on cash and primisary notes. Schlumberger presumably felt the sale to National was less risky. And if National would turn the Fairchild operations around and its stock were to increase in price, it could conceivably increase the value of the sale price.

The decision undoubtedly dealt a hard blow to Brooks and his management team, who reportedly were stunned when they learned about the sale to National. It is unlikely Brooks and some of his closest allies will want to go to work for National. By the same token, it is unlikely National would accept a group of executives who may have bitter feelings about losing the opportunity to own their own company.

While National is nominally paying only $US122 million in stock, it will acquire assets, such as plants and equipment, that are valued at between $US600 million and $US1 billion.

One of the major acquisitions, for example is Fairchild's state-of-the-art research facility in Palo Alto and its many top semiconductor engineering staff. At the facility, engineers are involved in some of the most far-reaching applications of semiconductor technology. One group is reportedly involved in exotic speech recognition research, while another group focuses on advanced digital signal processing. Previously, the Palo Alto group built Fairchild's very fast 32-bit Clipper microprocessor.

Besides the technological know-how, the purchase will significantly strengthen National's position in a number of key product areas, including:

LOGIC DEVICES: Fairchild, with Fujitsu, is the leading supplier of super-fast ECL components used in high-performance mini, mainframe and supercomputers. One of the reasons the Reagan Administration blocked the sale to Fujitsu reportedly centered on Fairchild's role as a key supplier to the supercomputer industry and its development of advanced new ECL devices critical to "Star Wars" and other advanced military computer projects. National will inherit this growing business, at a time of rapid expansion of the high-performance and supercomputer markets.

MILITARY SEMICONDUCTORS: A key part of Fairchild's business (30% of sales) during the past several years, has been its sales to the defence industry. Combined with its own sizeable Phoenix-based defense operations, National will become the leading supplier of defence-related semiconductors.

ANALOG AND DIGITAL DEVICES: While Fairchild's analog and digital product groups may have been responsible for some of the colossal losses the company has suffered during the past couple of years, analysts consider the acquisition a plus for National. Fairchild's product lines will nicely complement National's own offerings, and the firm's production facilities will add additional muscle to National's output capacity.

National may soon return these operations to profitability if the market for these products continues to recover, and by streamlining operations through lay-offs and other cost-cutting measures.

CUSTOM ICs: Fairchild has invested heavily in its custom IC operations. Among other things, the state-of-the-art gate array facility uses an exotic DEC-VAX-based E-beam lithography system from Cambridge Systems, that takes gate-array design data directly from a Cray supercomputer to write the circuit patterns directly onto the wafer.

MICROPROCESSORS: Following the acquisition, National will be in a unique position of carrying two state-of-the-art 32-bit microprocessors product lines. In addition to its NS-3200 line of products, National will own Fairchild's Clipper processor line.

It is not known whether National wants to carry two lines of 32-bit processors. A company spokeswoman said it is still too early to tell what National will do with the Clipper. Some industry observers speculated National may sell it.

Earlier, National officials said National may indeed sell off one or more Fairchild groups which don't fit very well into the National organisation. But it will be some time before those decisions will be made.

DISTRIBUTION CHANNELS: Fairchild has one of the most extensive marketing and distribution organisations in the industry. The fear that Fujitsu would use these channels to further its presence in the US was another reason behind the opposition to the proposed sale to the Japanese giant.

While all of these advantages would make the $US122 million purchase price seem unbelievably low, National is also inheriting some big problems. For one, Fairchild has been losing money for years. Lots of money! In 1986, the company lost $US93 million on sales of $US488 million. This year, Schlumberger had set aside some $US70 million to cover the anticipated losses in its chip operation.

National, however, may have more luck with Fairchild than Schlumberger, which has lost close to $US2 billion on Fairchild, including investments in facilities, R&D, operational losses and the $US456 million it paid for the company in 1979.

On the bright side, National will not inherit several of the sources that accounted for a major portion of Fairchild's losses, including two under utilised plants in Japan and Germany. Also, Schlumberger will keep the idled MOS plant in South San Jose, where chemicals leaking from storage tanks polluted the drinking water of a nearby neighbourhood in 1981. Residents believe the pollutants were responsible for the unusual high rate of miscarriages, still-births and birth defects in the area. Fairchild recently settled a huge lawsuit with the residents.

National, in particular Sporck, has a reputation of running an efficient operation. National will try to cut Fairchild's operational expenses through consolidation. In areas such as administration and marketing, major lay-offs are expected as many positions duplicate those within the National organisation. National, however, will have the luxury of keeping the best of Fairchild's management, marketing and engineering staff and letting the rest of these often highly paid employees go.

This is not the first time National has acquired a severely distressed organisation and turned it around. In the late seventies, National acquired what was left of the ill-fated Itel company, which leased IBM-compatible mainframe computers supplied by National. Despite the historically poor record of semiconductor companies in trying to branch out into the systems business, National was able to return the Itel group, now known as National Advanced Systems, to profitability in two years. Since then, NAS has grown steadily and currently accounts for as much as half of National's annual sales — and virtually all of its profits since 1984, when the chip industry went into its recession.

Because Fairchild is a semiconductor firm, National's own bread-'n-butter business, analysts believe it may be even more successful putting the Fairchild assets to work.

Wall Street apparently thinks so too. On Tuesday, September 1, National's stock rose to $US16.50 on the same day the New York Stock Exchange suffered one of its largest one-day losses in history.