

Oral History of Marshall Cox

Interviewed by: Douglas Fairbairn

Recorded: June 18, 2012 Corona del Mar, California

CHM Reference number: X6544.2012

Fairbairn: We're in Corona Del Mar. It's June 18th, 2012. And I'm Doug Fairbairn, interviewing Marshall Cox for the purposes of the oral history program at the Computer History Museum in Mountain View, California. So, welcome Marshall, delighted that you're here.

Cox: Thank you.

Fairbairn: And thank you for agreeing to do this session with us.

Cox: Great. Great introduction, Doug.

Fairbairn: So, as I mentioned to you off camera, we're going to just start from the beginning, want to get a little idea of what your background was and how you got started in technology and that sort of thing. So where were you born? And what was your family life like?

Cox: Well, I was born in 1935. My mother was a schoolteacher. And we moved from there to what's now called South Central L.A., which these days is kind of a bad area, but in those days it was like "Happy Days". I had a great childhood.

Fairbairn: Yeah, that's not a good area today, is it?

Cox: Not at all. It was fantastic when I was a kid. No worries about anything they worry about now. Anyway, I finished high school. I was class president.

Fairbairn: What about brothers and sisters?

Cox: I've got two sisters. They're both older than me, so I was the kid, spoiled son. And I liked that role. So, it worked out good for me. They're both widows these days, but they're in their eighties. I'm still in my seventies.

Cox: Two sisters, both are widows living in California. And had strong marriages, bunch of kids, got lots of nephews and nieces. And my oldest sister, Ruth, also graduated from UCLA where I graduated. And my mom graduated from UCLA in 1922, the first graduating class. And my daughter graduated-- Erin graduated in 1981. And her son graduated recently. So, we're a four-generation Bruin family. And I might add the only one.

Fairbairn: So you're growing up in South Central L.A. Did you have any idea about technology at the time? Is there any--?

Cox: Actually I wanted to be a dentist. And I thought it'd be cool. You didn't have to worry that much and you get called doctor. And make a lot of money and drive big cars and what have you. But I took an aptitude test at St. Mary's University. And it showed that I was B+ in sciences, but I was off the map A+ in business. So, I switched things. I ended up with a dual major. I majored in chemistry and business.

Fairbairn: At UCLA?

Cox: At UCLA, yeah.

Fairbairn: And before that you went to UCLA because your mother had gone there?

Cox: No, no I went there because I always loved UCLA. I had scholarships to other universities, but I went to UCLA because I wanted to. And no regrets there, although I did feel a little lost going from a big man on campus in high school to like one of ten billion dorks at UCLA as freshmen.

Fairbairn: So, you mentioned you'd been the senior class president because you were Mr. Outgoing?

Cox: Oh yeah, big jock and Peter Personality and all the requisites, but then all of a sudden I got brought down to the real world at UCLA as a freshman. And you had to take ROTC for two years in addition. And then I'm wearing a uniform. And anyway I survived.

Fairbairn: This is the mid-fifties when you're going to--

Cox: Early fifties.

Fairbairn: When you were going to UCLA, how did you choose your major? Did you--

Cox: Through this aptitude test. This aptitude test really steered me to general business, and specifically marketing. And the chemistry was kind of like to have a technical background, anyway. I mean I knew Ohm's Law, all the classics, but I knew I didn't want to be an engineer. And so anyway I graduated. In those days, you got drafted. So, I got drafted, went in the Army, hated it. They hated me. So, I had an opportunity to transfer to the Marine Corps. And I did, loved it.

Fairbairn: Now, what was the difference? Why Marine Corps better than the Army?

Cox: Well, it's a bit of a sense of pride. And let me put it this way, when I was in the Army, I was in the 84th combat engineers. I was the only college graduate in the battalion. They hated me because I was a college graduate. In the Marine Corps, they loved the fact that they had a college graduate in their midst. And this is all the difference in the world. Anyway, I finished my military service and went to work for a company I had worked for part time going to UCLA as a chemist called Sanford Process Company on Central Avenue. And it was a good paying job, but I knew I didn't want to be a chemist after doing that, going to college. So, I went into a sales program they had. And--

Fairbairn: At the same company?

Cox: At the same company, yeah. So, when I graduated from UCLA, I didn't have to look for a job. I already had a job. They wanted to keep me and put me in sales. So, anyway I was there about a year. And the sales manager was this old mean Italian bastard named Pete Sadoni. And old Pete died. And so, the general manager says anybody interested in taking Pete's place? Well, these sales guys were old heavy drinking, gambling kinds of guys whereas I'm very ambitious. So, I'm the only guy that raised my hand. So, I became an instant sales manager at I think about 24 years old. And I did that for I think about 5 years. And the company got bought. And it got bought by a competitor who I did not like and didn't want to work for them. So, make a long story short, I was going to graduate school at USC at night to get my MBA. And I did a study of 38 industries in the world, one of which was-- well all of them, but the one that I was most attracted to was electronics. So, I didn't know anybody in electronics. I wasn't an EE. So, I got a hold of a headhunter-- I forgot the name of it, but anyway they introduced me to a new start up called Fairchild. And the regional manager was Don Valentine who ended up being kind of famous venture capitalist.

Fairbairn: Absolutely.

Cox: And good friend. And anyway, I had an interview set up for three o'clock. I was supposed to bring my resume with me. And I was supposed to be a BSEE. So, on the way to the Valley where the Fairchild office was, I had a flat tire. So, I was late. I was dirty. It was in the summer. It was over 100 degrees.

Fairbairn: Were you driving from Southern California?

Cox: Yeah, from the beach. I lived in Redondo Beach at the time. And I was late for the interview. And I wasn't an EE. And I forgot my damn resume. So, I walked in and I exploded. I said hey I'm Marshall Cox. I'm your three o'clock. I'm late. I'm dirty. I'm not an EE. I don't have a resume. If you want to end it right now, fine. Don said come on in. <laughs> They were looking for aggressive guys. So, I did. And Don hired me, which another funny story. He offered me a job that first day. And I was told going to graduate CHM Ref: X6544.2012 © 2012 Computer History Museum Page 4 of 22

school, of course, if you ever interviewed for a job, and they offer you a job immediately, that's a bad company. Don't go to work there. So, I really didn't accept because I remembered hearing that story. But fortunately, I did. And it was obviously the best decision in the world for me.

Fairbairn: So, what year was that?

Cox: That was '62.

Fairbairn: '62, so they were just getting started.

Cox: Oh yeah, their sales were less than a million a year.

Fairbairn: So, who also was there at the time? Valentine hired you.

Cox: But Valentine was the Southwest regional manager. The national sales manager was Don Rogers. He was a short little crazy guy and heavy drinker. And so I interviewed with-- Don set me up to have an interview with Don Rogers. So, I met him at the Cockatoo Restaurant by the airport, I remember. So, all of a sudden, this crazy little bastard shows up. And he says are you Marshall Cox? I said yeah. He says come on; we've got to talk. So, we went to a table. He ordered two bloody marys for himself, immediately. I forgot what I was drinking, but anyway he downed those two. And then didn't say a word. And it was like getting embarrassing. So I said if you already know you don't want to hire me. I don't give a shit. I mean listen let's end it now, put yourself out of our misery. But this is crazy. Oh, I'm sorry. Geez, I'm really sorry. I just lost an order at Hughes. I'm so pissed off I can't stand it. He was a very competitive guy. Anyway, I guess I passed his scrutiny. And they hired me at Fairchild. Don Valentine put me through a ten week training program, four days traveling with each of the sales engineers in the Southern California area. And then one day with him going over technical questions or any kind of question. And I did that. And I was assigned to the Phoenix office as a district manager. And Phoenix office was a disaster. Their backlog was negative. I don't how you can get a negative backlog, but they had one.

Fairbairn: So, did you actually have to move to Phoenix?

Cox: Oh yeah, I moved to Phoenix, yeah. My wife, at the time and three kids, maybe more than that-- four kids, no three kids. And anyway I loved Phoenix and loved the job. And I was very lucky and successful. And when I left after a year we had backlog in excess of multi-million dollars, which is a lot of money in the early sixties. And so, I got promoted to become the Eastern regional manager. So, I moved back to New York. I handled the sales and marketing from Canada to Florida. And Don Valentine, in the interim, had been promoted to national sales manager. Don Rogers went on an assignment to SGS in Italy to

teach them how to sell like Americans in Europe. And anyway, let me take a break. I need a drink of water.

Fairbairn: Sure. So, who were the other major sales people at the time? Were there other people?

Cox: Well, Jerry Sanders, Jim Martin, Bernie Marren, a guy named Smith whose father was the president of American Airlines at one time. He handled IBM for us. There were a lot of good sales people. I've got something to show you. I don't want to give it away, but I'm going to show you before you leave. All the sales meetings at Fairchild in the sixties, you want to see the names of characters, yeah.

Fairbairn: Absolutely.

Cox: Anyway, where the hell was I? You taking notes?

Fairbairn: You were in New York, Eastern sales manager.

Cox: Yeah, my headquarters was New York, but I handled from Canada to Florida. And I inherited three guys. And my budget was I think around five million dollars. And Valentine's instruction was you can have reps everywhere until you build the backlog. Then you can hire a direct guy. So, to make a long story short, after a year the backlog was \$16 million. So, I creamed the budget. And I went from three guys to about twenty, which grew to the biggest area for Fairchild. Two years later, we were doing \$60 million.

Fairbairn: Who were your major customers? What were the major--?

Cox: IBM. Well, my market was the major computer manufacturers. So, my biggest customer was IBM, but DEC, DG [Data General], NCR when they were there, RCA, Univac, all the major East Coast computer manufacturers, and peripherals, some peripherals, too. And so that was my specialty was knowing those customers and knowing them pretty well. And two years later, I got promoted to director of marketing to take over the computer market nationwide, again working for Valentine.

Fairbairn: So, what was Jerry Sanders doing at the time?

Cox: Jerry was the military guy. I was the computer guy. And Jerry was the military guy. Bernie Marren was the consumer guy. And Jim Martin was the industrial guy. And I don't know if you know Jim. But Jim left Fairchild and went to work for Capital Research and was very successful in business. He died about ten years ago. He was a young guy, terrific guy. And anyway, I got promoted and moved to Silicon Valley.

And each of us had a market, marketing managers for a market. And very competitive, we kicked ass, took names.

Fairbairn: What were the major products?

Cox: Oh, semiconductors.

Fairbairn: I know but which--?

Cox: Integrated circuits.

Fairbairn: Just TTL--?

Cox: Well, it started out RTL for those nice slow designs. And then DTL, but the thing that really put us on the map as the biggest integrated circuit manufacturer was custom circuits. And each of the computer manufacturers had their own custom circuits that we designed for them and manufactured for them.

Fairbairn: Was that with the micro matrix program?

Cox: No, uh uh. No it was pure custom design, yeah. It was headed by John Carey and Joe Rizzi who both went on to various activities. In fact, John Carey owns, I think, half the state of Idaho now. He went into real estate big time. But anyway, we sold some standard circuits, DTL and peripheral applications. CTL for real high-speed cache, which was a custom family for Fairchild. And RTL for slow, slow stuff. But it was successful and we were the biggest IC manufacturer by the year-- not including hybrids. We never really got into hybrids like TI did. I'd say we were the biggest by 1967. And in '67, they reorganized a lot of Fairchild, operations mainly. And Noyce became the group general manager, not just semiconductors, but he also had the industrial division and the consumer division. And Charlie Sporck was promoted to be the general manager.

Fairbairn: So, was Sporck in sales, as well?

Cox: No, he was operations always, the classic tough cigar chewing operations guy. And Charlie became general manager of Fairchild Semiconductor. And Tom Bay [ph?] who was the director of marketing-- the top marketing guy became the general manager of instrumentation division. And that's when Valentine moved into the top marketing guy. And we did that for a couple years. And then Charlie left Fairchild and took most of the really good operations guys with him to National.

Fairbairn: So, what were the strengths of Fairchild? It sounds like you had a incredible sales force.

Cox: Incredible sales force, incredible R and D. I mean with Noyce and Gordon heading it up, you couldn't miss. Strong operations with Sporck and his disciples. Those three activities. We made a lot of money, so we didn't have a need for big time financing. We were owned by Fairchild Camera and Instrument.. And anyway, Charlie left and took a whole bunch of really good people with him, Pierre Lamond, Roger Smullen, etc.

Fairbairn: Was he the first big exodus?

Cox: Yes. First top-level exodus. There were other guys leaving now and then. Bob Graham left, for example, he was the product marketing manager. He left and went to ITT as the head of marketing. But the real high exodus was Charlie. So, one by one, guys started bailing out.

Fairbairn: So, when did Gordon and Noyce?

Cox: They left in late '67.

Fairbairn: Soon after Charlie, then.

Cox: Yeah, and--

Fairbairn: So, did you feel the writing was on the wall at that time?

Cox: Writing was on the wall, no question about it. So, I ended up getting approached by Tom Phillips who was the CEO of Raytheon. And so, I went to Raytheon as the head of marketing in '68. And I had never worked for an enormous company like Raytheon. I mean Fairchild was pretty big, but not like Raytheon. Raytheon had a policy procedure book on everything, on how to park your car, how to go to the bathroom, how to drink. I mean it drove me nuts because at Fairchild we were wild and wooly. And we could do what we damn well pleased so long as you brought in the business.

Fairbairn: So, before we leave Fairchild, was there a lot of camaraderie between the various sales people? Were they were very competitive?

Cox: It was competitive but lots of brotherhood, too. We played together. We drank together. We chased together. It was probably. It was a closer relationship than a fraternity. And yeah it was sad when they all

left and went different places, but we still saw, and still see each other to this day. And shit what's that been, fifty years? So there was something there. You had your occasional enemy in the ranks, but we didn't talk to them.

Fairbairn: So, okay so you went off to--

Cox: Raytheon. I stayed at Raytheon for a year and a half and couldn't stand it. And I was getting-- was influenced by knowing the VCs hanging around Silicon Valley and contacting me and wanting to know if I had any ideas. Would I like to start a company? And I did have because at Fairchild, we-- because of my computer orientation, I was very involved in memory, mainframe and cache and what have you. And so, I decided what the world needed was a 64 bit static RAM. The most complex thing on the market at that time was a 16K. No, yeah 16 bit.

<laughs>

Cox: Going up by a thousand. And so, anyway we talked about it at Fairchild. And it was impossible to do because the transistors were still too big and what have you. Anyway, to make a long story short, I got approached by Fred Adler who was a very famous venture capitalist in those days. He did Data General for openers and a couple other ones.

Fairbairn: He was like the original guy, right? One of the original Silicon Valley--?

Cox: Yeah, Arthur Rock was probably the first venture capitalist in Silicon Valley, but--

Fairbairn: When did Valentine get in venture capital?

Cox: Let me think here, '68.

Fairbairn: So, he left Fairchild--

Cox: He left Fairchild and started a thing called Sequoia. And it was funded by Capital Research, which was Jim Martin's company.

Fairbairn: Got it, okay.

Cox: And where the hell was I?CHM Ref: X6544.2012© 2012 Computer History Museum

Fairbairn: You had left Raytheon after a year and half.

Cox: Yeah, and anyway Fred said you start it. You want to do static RAMs. Let's go. So, he said however, check this out. He said if we can get with somebody that already has fab equipment-- because it was really tough getting equipment in those days, long lead times. Get with somebody that already has the facilities, and that'll shrink our lead times by a year, at least. So, make a long story short, we merged with Intersil, which was Dr. Jean Hoerni's company. But they made field effect transistors and hybrids, but they had the equipment for our memory products.

Fairbairn: Now, Hoerni had come out of--

Cox: He came out of Fairchild. Yeah, he was one of the original eight. Famous guy, probably the brightest of all the scientists at R and D at Fairchild, but impossible to work with. I mean a real prima donna, but a brilliant guy. So, anyway we merged our little thing with Intersil. And we called our deal Intersil Memory versus Intersil. I came in as EVP of Intersil, and president of Intersil Memory. And then a year later, we merged the two. So, Intersil Memory was just a division. I was responsible for the whole company. And we made 64 bit, 256, and went into--

Fairbairn: What technology was this?

Cox: Bipolar, gold-doped bipolar.

Fairbairn: And what year was that? When did you actually design your first product?

Cox: '70, 1970. And what's funny is the group from Fairchild that was the group I worked with mainly in memory, I brought into Raytheon. And they were as disgruntled there as I was. So, when I left to start Intersil Memory, they left to join me. And so, sure enough about six months later we got sued by Raytheon for stealing technology. They never even had it. But I personally got sued for \$55 million, which in those days I had about three dollars and eighty cents.

Fairbairn: Yeah, \$55 million was a big number back then.

Cox: You're not kidding. And that suit went on for seven years and settled for nothing. I mean talk about the big guy wanting to kill the little guy. That's a classic. But that was the formation of Intersil, and I ran that until '77, I think, and decided I wanted to become owner of a resort. I wanted to live in Hawaii or Palm Springs or Lake Arrowhead, or someplace. So, I resigned and spent six months looking around the world at some place to buy, a resort. And by the time I finished, I realized the grass is greener. And it's too

much like work owning a resort. And I missed the hell out of electronics. And it was like what a lack of utilization of this experience going into that. So, I decided of all the things I did in my career, what I liked best was marketing and sales. And so, what kind of marketing sales company can I start? Well, I could do a PR, advertising, sales rep and the one that kind of jumped out was distribution. And so, I--

Fairbairn: Before we get into that, I don't want to interrupt, but I'd like to go back and talk a little bit more about Intersil. So, you formed it because you thought the world needed 64 bit RAM.

Cox: Well, we got with Intersil because they had the equipment.

Fairbairn: Right, but your small company that Adler helped fund was aimed at the memory market.

Cox: Absolutely.

Fairbairn: And then--

Cox: But I also took over marketing for Intersil, which means linears and FETs and hybrids.

Fairbairn: So, how did Intersil grow during that period? Did you maintain all those product lines?

Cox: Maintained them all. And they grew. Memory obviously grew faster than the other because the market grew faster. But the-- what's interesting is the analog portion of Intersil is still alive. It's called Intersil. They're a public company. You can buy stock in them. They do pretty good. It went from Intersil selling to-- who was the first one? GE. And GE decided to go out of semiconductors, so they sold to RCA- the old Intersil, who went out of business just about and sold to Harris. And there was this spin off from Harris when Harris got in trouble ten years ago or whatever. And these guys that were at Harris that were from Intersil are Intersil to this day. In fact, I own stock in them, the new Intersil.

Fairbairn: And were they doing analog at the time?

Cox: Yeah, oh yeah. But I would say they were doing mainly second source kinds of products, nothing proprietary, whereas our forte was proprietary.

Fairbairn: So, what do you think the biggest accomplishment at Intersil? What was the biggest contribution to the industry?

Cox: Well, from a technical point of view, I'd say static RAM pioneer. And I'd say PROM and EPROM developer. There was none. We developed that whole thing.

Fairbairn: So, were you in EPROMs before Intel got into them?

Cox: Yeah, in bipolar.

Fairbairn: Oh, I see.

Cox: Yeah, they were MOS.

Fairbairn: So, did you ever do MOS, or are you strictly bipolar?

Cox: We didn't do-- I think we developed some products in P Channel just to get some experience. Then we-- with Intel all of a sudden coming out with some neat N Channel faster memory, we did a few of those. But our forte was the uniqueness of our CMOS metal gate and then CMOS silicon gate technology for memory because they were low power and fast as hell. And we developed a whole family, microprocessors, all the peripherals, the memories in CMOS, industry's first. Now, all the crap is CMOS. Those were the days, my friend. I thought they'd never end.

<break in audio>

Fairbairn: Okay, we're going to begin again. We just finished the Intersil portion of the story. Anything else that particularly you remember? Did you try to fashion the Intersil sales operation after your--

Cox: Yeah, we did. Actually it's interesting. Good question, angry at myself I didn't bring it up myself without your help there, Doug. But yeah I wanted to start a distributor that specialized just in high tech complex circuits, no passive devices, no discretes, no nothing. And the guy coming on strong in those days-- this was 1977, was the Japanese. And so, we were the first distributor in America to handle the Japanese. And we rode their success curve all the way up selling complex circuits mainly, which is what their specialty was, and memory.

Fairbairn: So, this is the Western--?

Cox: This is Western Micro Technology.

Fairbairn: But I'm sorry, I was sort of taking a step back into the Intersil world. When you were running this operation, did you try to sort of get that Intersil sales force strong like Fairchild was?

Cox: Oh, absolutely. We hired-- a lot of old Fairchild guys were there, too. In fact, I'd say most of them were ex-Fairchild types, very aggressive sales force. And they handled all products, analog and digital. So, we tried separating the two, but it's like a waste. If somebody's eyeball to eyeball with the buyer that buys everything, and you're only selling linears, it's a waste of time not to push the other products you have. So, we went to one sales force.

Fairbairn: So, how big did Intersil get to be before you moved on?

Cox: I think around the biggest annual sales volume we did was \$21 million. We went public, of course. I think we went public at 7 or something like that, some number-- seven or eight dollars a share, and ended up-- I think the high ever was 20 something. But usually-- when I left it was around 14 bucks. And if that's a calibration of success--

Fairbairn: So, then you looked at the resort area. You decided that wasn't for you. And so, you went back and looked at the sales and marketing operation. So, tell me about how that got started. Did you start it from scratch? Any funding--?

Cox: We started from scratch. Bernie Marren, who's one of the old Fairchild guys, he and I were having lunch. He had left AMI about the same time I had left-- actually retired from Intersil. And he was going a little crazy. And I was going a little crazy. So, we had lunch. And we were talking. And I told him my ideas. And he says god it sounds great. Why don't we do it together? It sounded like that made sense. So, we did. We started in '77. And through I think '87 we were the fastest growing distributor in the world. We went from nothing to over \$100 million a year.

Fairbairn: And you were mainly focused on--

Cox: The more complex--

Fairbairn: The Japanese vendors?

Cox: We had some American vendors, but the Americans didn't want to share shelf space with the Japanese. They hated the Japanese in those days. And then the Japanese got so they didn't like each other. So, it was tough keeping everybody happy. But we had some-- Harris was our biggest American line.

Fairbairn: Is that military, or other?

Cox: No, commercial. Because they had a product mix very similar to Intersil's. They made bipolar memory and linear circuits. And it was a perfect fit for our guys knowing what-- where the homes are for those products. And Harris was our biggest line. And that's when Don Sorchek was the general manager there. And Jimmy Dykes became general manager when Sorchek retired. Dykes, by the way, had a massive stroke five years ago, now. He's still living in Florida, but he can't even speak. It's really a sad story. He was a really sharp guy.

Fairbairn: So, this is a time when the Japanese were exploding really in terms of sales growth.

Cox: Everything, not just in semiconductors, in everything. And it was before their bubble burst. But their bubble burst after I was gone from Western Micro. When the hell did I leave? I left, I think '95. It was the year before you. I left in '95. I retired for good, never again do I want to have anything to do with electronics.

Fairbairn: So, when did you-- I'm sorry, tell me again when you started Western Micro?

Cox: '77 and I was chairman and CEO. Bernie was president. We hired some distribution experienced guys to help us know what we were doing. And we had great success. We rode the curve of the products that were the hottest, fastest growing microprocessors and memory and peripherals, and with the major suppliers of those products, i.e. the Japanese.

Fairbairn: Now, meanwhile, some of your buddies had gone off and established some of their own semiconductor companies like Charlie Sporck and Jerry Sanders. Were they upset at you for representing the Japanese?

Cox: In the beginning, but especially Charlie. But Charlie's not that way anymore. He's a buddy. We surf together when-- he lives in Hawaii. And we get over there. It wasn't like Marsh, don't take it personally, but because you have the Japanese, I don't think we can give you the line. Because boy I tried for twenty years to get the line, both National and AMD. And like I said, the biggest one we got was Harris.

Fairbairn: So, what are your fondest memories of the Western Micro days? What was the highlights?

Cox: It was almost a repeat. Everybody was older, of course. Instead of being in their twenties, they were in their forties. But it was a let's work hard and play hard. And it was like a big fraternity. Like our reputation-- well we were nationwide by the time we finished our expansion program, but our

headquarters was in Saratoga. And we had a reputation in Silicon Valley of throwing the best parties in Silicon Valley. We were quite proud of that.

Fairbairn: Probably picked up from Fairchild, right? Fairchild had a reputation.

Cox: Yeah. That and we figured out a way to get each of our suppliers, we had probably forty, to contribute a little something for these parties. So, we had a lot of money to spend. Great parties. In fact, we called it East meets West. That was the theme of each of our parties. We had posters made what have you. And for example, it'd be like a Japanese mask and an American baseball catcher's mask together. It was always that thing. And we thought it really would help relations. I'm not so sure it did. But our customers sure had a hell of a good time.

Fairbairn: So, you're making lots of trips-- you must have been a regular commuter to Japan?

Cox: Yeah, at one time, I went there eight times in three months. But after a while it was usually twice or three times a year.

Fairbairn: So, you finally decided that it was time to move on.

Cox: I took [Jack] Balletto by the way-- I met Balletto in Shinjuku, showed him that town. That's where our sister company called Internix, Japanese company, which was the mirror image of Western Micro. They were a Japanese company that handled nothing but non-Japanese suppliers and high technology, high complexity products, as well. And they started about the same time.

Fairbairn: So, did you need any outside financing to start Western Micro, or were you--?

Cox: No, we did it ourselves. Yeah, Bernie and I did it. We did a round-- one small round just to let our buddies get some before we went public. But it wasn't necessary. The company truly was profitable from about the third month on. And at one time, we were-- the public company was the most profitable distributor.

Fairbairn: And who were the major Japanese vendors that you represented?

Cox: Hitachi, NEC, Toshiba, Mitsubishi. There's none we didn't.

Fairbairn: You had them all.

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Cox: Yeah, Sharp. I mean you get down to that level. Sony. We had them all.

Fairbairn: And you focused on the higher tech, on the microprocessors.

Cox: Oh yeah.

Fairbairn: Did you do the memories, I mean when they were going gangbusters in dynamic RAM and all?

Cox: That was a big part of this success for the Japanese. They were building DRAMs when they were still trying to here. Intel was the first guy, except they quit memory, which just opened the door for the Japanese who came in and had a license from Intel. But just kicked ass and took names.

Fairbairn: Yeah, nobody could believe the yields they were so high - the prices, and so forth.

Cox: Yeah.

Fairbairn: That was a real eye opening time for the U.S. industry. So, what--

Cox: I never felt like a traitor. I always felt like a true American, in spite of having these Japanese suppliers.

Fairbairn: That's what the world needed. I mean Americans needed to learn some important lessons at that time.

Cox: Yeah. And also, it's a worldwide market. It's not just U.S. or Japan or--

Fairbairn: So, what was going on at the time you left? What was the impetus for your stepping down at Western Micro Technology?

Cox: I think I'd had enough traveling and what have you, and I wanted-- to be real blunt, I wanted to start spending my money. I married her. Yeah, she's a good spending center.

Fairbairn: Pointing to Donna, his lovely wife over on the side here. <laughs> So, subsequent to that, you said you got into some venture capital work yourself?

Cox: Yeah.

Fairbairn: Tell me about that.

Cox: Well, I see myself as a pretty good technologist. I'm not a double E, but I have a good handle on winners and losers and new technologies. Like a sapphire on-- SOS, remember that was going to be the next thing, killer. I knew that was a stinker. And so, I thought I knew components, and I was getting to know systems better and better. And software was my least strength, smallest strength. And there's--once you hang up your shingle in that business, as you know, whether it's angel investing, or VC, whatever you want to call it-- you hang up your shingle, and you have business plans crossing your desk. And it's a matter of meeting the people, meeting the plan, meeting the realism of the plan, and thinking you can make a contribution, other than your money. And it sounded like a really good thing.

Fairbairn: What was the name of that operation?

Cox: Saratoga Boys Club, which was not to discriminate against women because I had a lot of women investors, but it just sounded like it was more of a club, more of a fun thing.

Fairbairn: And so, you got outside investors. You put your own money in.

Cox: Yeah. I had outside investors and my money.

Fairbairn: And what state of financing were you focused on, the early stages?

Cox: I focused on seed, but I made sure we had dough when they needed their second and third, and whatever-- these days, their tenth round of financing. It was there covered. But during my time in venture capital, it was-- the lead times were a lot shorter. I mean you put your money in, and boy I'll tell you in two years, if they weren't public or bought, you were a little disappointed. In five years, you were devastated. Shit, now five years sounds like nothing. It's ten years.

Fairbairn: So, how long did you stay in that business?

Cox: I stayed in it for over ten years. And then once again, it got to be too much work and not enough play. And Donna and I like to travel. And it was interfering with my ability to have fun.

Fairbairn: So, what did you do with the companies that were still part of your portfolio that you couldn't sort of get into the liquidity stage?

Cox: I still have them.

Fairbairn: You still have them?

Cox: Yeah. Like I told you, I got a letter yesterday. There's an annual meeting of Globalware in Boston next week. Are you going to be there? No. I thought those guys were dead.

Fairbairn: So, what were maybe one or two of your biggest successes, the companies you felt proudest of and had the greatest--?

Cox: NexGen was probably the biggest.

Fairbairn: That was Atiq Raza?

Cox: Yes, I was on the board there, as well.

Fairbairn: Atiq and I worked together at VLSI Technology.

Cox: He's a hell of a good guy. I don't know what the hell happened to him.

Fairbairn: He's still around. He was--

Cox: Seems to me he dropped off the face of the Earth.

Fairbairn: He was doing another company the last time I heard, but that was some time ago. He and I worked closely together.

Cox: I did, too.

Fairbairn: So, NexGen, and that got bought by AMD, right?

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Cox: Yeah, I and I might add, I like to take credit for doing that because Sanders at AMD had great equipment and not so great engineering staffs. And at NexGen, we had great engineering staffs and not real good equipment. So, I talked to Jerry about NexGen. And he had his guys get with our guys. To make a long story short, NexGen sold for almost a billion dollars, which was a good number.

Fairbairn: Quite a number for a product company like that.

Cox: And saved AMD's ass, as far as I'm concerned. All their spectacular products that last ten years have been from NexGen, NexGen designs.

Fairbairn: These are all 8086 family products?

Cox: Yeah.

Fairbairn: Yeah, they had spectacular engineering staff.

Cox: Yeah, but it was funny. I'd go over there just because I knew Jerry and Steve Zelenzik, and a lot of the guys at AMD. And we'd show up from NexGen, and everybody's in their golf shirts like you and khakis. You go to the top engineering guys and AMD, pinstripe suits, button down hugger shirts, and ties and all trying to emulate Jerry. But they got along okay together, but the NexGen guys were the winners taking over the engineering departments at AMD because they were so damn good.

Fairbairn: So, tell me about another one of your successes.

Cox: Oh, I think another one would be-- shit, I don't even-- Well, Cytori, the stem cell company in San Diego. That was one round at 25 cents. We went public at 20 bucks in about a year.

Fairbairn: Now, you were in electronics. How did you get involved in the medical-- bio--?

Cox: Because I was an angel for this company for a while. I gave them the money to see if they could prove their technology, which they did. And then once they did, I said well then I know it's going to work so I'll bring in some professional money.

Fairbairn: So, you just did this-- you didn't have a background in medical technology?

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Cox: Not at all. But stem cell, who the hell did. I know this, when they say you take a thing. You take fat out from your stomach, and you mix, sort it, what have you, and then separate it by cell. So, you've got heart cells, brain cells, hip cells, what have you. And then you have an operation on your heart. Take these heart cells, zap in that guy's heart. And he's going to be healthier because they multiply like rabbits, the cells. That's pretty easy to understand. And that's the way it works.

Fairbairn: And that company is now a public company?

Cox: Yeah. They're doing okay. I'll tell you there were a lot-- I'm having a senior citizen thing with my companies. I wanted to have a whole list of my winners for you because I thought that would be a question. And I can't think of-- I'm drawing a blank.

Fairbairn: Okay so, we're going to wrap up here. And we'd like to talk about some of the other companies that Marshall had invested in. You mentioned one in Japan.

Cox: Yeah, it's a company called Internix. And it was formed to copy the specialty of Western Micro, which was a Japanese distributor handling non-Japanese suppliers. So, they handle European and American suppliers. I've been very successful with that in Japan. They do over a quarter billion dollars a year in revenue.

Fairbairn: All in semiconductors?

Cox: Yeah. Well, all in components. And classic company, they're in probably ten major cities in Japan. They're also in Shanghai, and Hong Kong, and I think-- I don't think Vietnam, but I think one other, maybe Taiwan. So, they're international, very classy outfit. And with their approach being they hire engineers. So, these guys are distributors, but they know the products much better than just quoting a price and delivery. And that's been a successful combination for them. Run by a really talented Japanese guy that graduated from Columbia University, went to high school in Milwaukee. His English is superb. He knows every joke known to mankind, American versions.

Fairbairn: And when did you put the money into that company?

Cox: Well, more than once. The first time in '70, '71 I've forgotten.

Fairbairn: Personal money at that time.

Cox: Yeah. I always did a lot of that for some reason. I got a kick out of it.

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Fairbairn: And then they went public in--?

Cox: They went public in probably '80, around '80.

Fairbairn: In the NIKKEI exchange?

Cox: Yeah.

Fairbairn: So, you also invested-- you had this biotech company that did stem cells. You put some money into Cadence, with their system innovations?

Cox: Yeah, that was really through Balletto more than through-- I mean I used as the vehicle the Saratoga Boys Club, but it was-- I was kind of an add on to Jack. What's his company called, Sunrise or something like that?

Fairbairn: Yeah, Sunrise Venture Capital, right. So, as you look back on your career, what is the-- when did you have the most fun? What are you proudest of? What's the--?

Cox: Yeah. I think I'm proudest of-- I'm proud of all of them. But I'm proud of my rapid promotion path at Fairchild. I'm proud of the proprietary products we brought to the market at Intersil. I'm proud of the new marketing strategy we performed at Western Micro in distribution. And kind of proud of the VC efforts, although I wish I'd got into VC thirty years before I did. But it's never too late, I guess. Anyway, I had a lucky, lucky life and a good career, and timing was good. And it's happy days.

Fairbairn: So, do you have kids and grandkids? Do you advise them to go in technology? What's your advice for--?

Cox: No, I advise them to go to college, but I-- my oldest daughter was one of the first marketing people at Intel. And so, she's pretty technical. She worked as an FAE at Intel. Her son, my grandson, is a double E from UCLA. So, he likes technology. His major was nanotechnology, which is a new thing, which is really hot.

Fairbairn: Hot market now.

Cox: My daughters from number two down were mainly business types. My son is an education teacher. He saw the amount of travel that you have to do if you're going to be successful in business, and he didn't

want anything to do with it. So, he teaches elementary school, very happy. That's what it's all about, being happy, I guess. But what I was happy doing is what I did. That's why I'm a lucky guy.

Fairbairn: All right, well thanks very much. I appreciate your spending the time.

Cox: Thank you, Doug.

Fairbairn: Hearing the stories, it's always fascinating to get the background of what happened back then, and I really appreciate your taking the time and the effort to do this.

Cox: Didn't get anybody in trouble.

<laughter>

Fairbairn: All right, thanks Marshall.

Cox: Thank you, Doug.

END OF INTERVIEW