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**Robert Chandler**  
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San Jose, CA 95123  
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## **PROFESSIONAL SUMMARY**

A Senior "Hands On" PCB Design Manager with well over 25 years of experience in a wide variety of product areas. Extensive experience and knowledge of many software platforms, including Cadence Allegro, OrCAD Layout, and Mentor Graphics. Working knowledge is such that I have trained many engineers and designers in these packages.

I have experience with large companies, small companies, established companies, and start-up companies and have also started a number of successful service companies. I have designed boards, and managed designers, engineers, and technicians. I have been a Project Manager for mechanical projects, PCB projects, and software projects. I have run large teams, up to 40 designers and engineers, and small teams – two or three people, and "virtual" teams, made of up designers and engineers in several countries.

I started at TRW, ESL in Sunnyvale, CA. It was here that I got my first degree from San Jose State University. At TRW, I managed a group of mechanical designers and engineers, as well as a group of PCB Designers. This was difficult at first, because I was quite younger than most of my employees, and I didn't have a great deal of experience. What I did have was the ability to let people do what they do best. I worked with the engineers to remove the barriers and obstacles that prevented them from doing their jobs. I gave the designers and drafters the tools and support that they needed to succeed. Within 1 year of my taking over the department, we went from an average of 60% late projects, to Zero.

I left TRW with some engineering friends of mine to start a service company called CADCOR. This was a typical engineering service company, doing work for a wide variety of clients. At our peak, we had three offices, and 40 designers and engineers working for us. I was responsible for the day to day operations of the company.

After a brief imprisonment at Lockheed, I returned to TRW for another 6 years. Again, managing and designing. I have always been a very "Hands On" manager. Leaving with another engineer, we started another service company in San Jose, PCA Design.

At PCA, I was responsible for up to 20 designers and engineers. We did large boards, small boards, analog boards, digital boards, and everything in between. Working as a service company, all of our projects were late when we got them, and we were on a very tight budget. For each client, we had an entirely new set of standards. I worked very closely with the client to ensure that they got just what they needed. We had over 90% repeat business. We had sales of over \$2,000,000 annually.

While at PCA Design, we developed a unique software program to translate from one CAD program into another. I was the Project Manager for the software development, responsible for three programmers, a "tester" and I personally wrote the users manual. It was a great product that nobody wanted.

CA Design was started soon after a fab house purchased PCA Design. This is, and has been my "insurance" against unemployment in the electronics marketplace. Started with my wife as our Marketing Manager, myself as the Operations Manager, we built and have keep between 5 to 15 designers very busy. CA Design offers training, design, engineering, and production services. This service bureau company works for large companies such as Apple Computer, and small companies, such as Sentinel Vision. The business normally has as many as 20 projects going at the same time. Once the business was stabilized my wife took over operations and I worked outside the business as a full time employee at Set Engineering and then Apple Computer. After leaving Apple as a result of a RIF and offshore outsourcing strategy I rejoined CA Design in Aug 04.

## **EXPERIENCE SUMMARY**

PCB Design – over 25 years of Analog, Digital, RF, Micro-wave, Micro-via, high-speed, and Power Supply design.

I have designed large – Main Logic Boards (MLB) for Apple computer, Texas Instruments, Panasonic, National Semiconductor, Philips, Intel, and several smaller companies, such as Ricoh, Roku, and Tentmaker Systems. Some of my more notable accomplishments include: for Apple Computer – The latest MAC desk-top. The 17 Inch Power MAC Portable, the “Mini-MAC”, the Apple X-Server, Apple “Airport” units. For Intel – the first blind/buried lap-top. For Philips – the Velo – the first “palm-top” computer. I have designed PDA boards for five different companies.

I have designed RF boards for Seamux Technologies in Texas, for Trimble Navigation in Sunnyvale, and several other small companies.

I have designed Test Boards at CA Design for multiple companies, as well as Apple Computer( after I left there). 100% test point coverage was a requirement for Apple. I also worked closely with the Test Engineer to complete the Test Fixture boards.

MANAGEMENT – I have managed designers and engineers at TRW, Lockheed, CADCOR, PCA Design, Apple Computer, CA Design, and SET Engineering. I have been a Project Manager, responsible for budget and schedule for projects at TRW, PCA Design, Lockheed, Apple Computer, SET Engineering, and CA Design.

## **EXPERIENCE:**

**August 2004 to Present**

**Senior Partner, CA Design**

Returned to CA Design after leaving Apple. See background below

**September 24, 2001 to July 22, 2004**

**Sr. PCB Design Engineer, Apple Computer**

Responsible for design of Main Logic boards, and all daughter boards. Designs include processor boards, Motherboards, PCI cards, Memory cards, wireless cards and interface cards. Designed using Cadence Allegro and Spectra High Speed Auto router.

**April, 1999 to July 24, 2001**

**Manager, Set Engineering**

Set Engineering is a small engineering consulting firm with offices in two states. My responsibilities included hands-on design using Mentor, Cadence Allegro and Spectra software. I was in charge of management and coordination of the design team. We specialized in large, high-speed Telecommunications boards. Included in my tasks were training, scheduling, libraries and managing outside resources.

**July, 1988 to April 1999**

**Senior Partner, CA Design**

Started CA Design as a small, yet highly talented design service company specializing in OrCAD, Cadence Allegro and Mentor. We train engineers and designers to do layout in OrCAD and Cadence Allegro. CA Design has done large digital boards, small RF boards, High Speed, Chip on Board and Micro via Designs for Panasonic, Siemens, Phillips, Hydroscience, Rockwell, Coherent, Cornell, Space Vector and many more large and medium size Companies.

**March, 1995- July 1997**

**Manager, PCA Design**

PCA Design was a medium sized service bureau with design centers in multiple locations. I was responsible for scheduling, staffing, training, customer relations, bidding and design quality for the design center.

**February, 1987- March 1995**

**Manager, TRW**

Working as Manager of Contracted Services for TRW Sunnyvale, I developed a working model for controlling and integrating Design Service companies into the TRW design process. This process has been copied and implemented at several leading companies in the industry.

**PERSONAL ATTRIBUTES**

I am focused and determined and what ever I set my sights on gets done. My projects don't fail. My customers are always happy. I am easy to work with, and my employees enjoy working for me, and with me. The clients find me honest, fair, and trustworthy. I work well with engineers by treating them with the respect they deserve, while still ensuring they meet the stated requirements. I know enough about engineering to know when there is a problem, and I have the experience in design and customer relations to ensure a quality product. There is very little I can't do, and with a team of qualified designers and engineers, that list gets even smaller.

**EDUCATION**

MBA – Operations Management  
BS- Business Management

San Jose State University  
San Jose State University