

# Made in Silicon Valley

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By Janis Mara



*Traditional wisdom holds that manufacturing is dying in Silicon Valley; times they are a-changin'*

As manufacturing jobs trickle back to America, a funny thing is happening in Silicon Valley: Early signals are that they are coming back here, too. The resurgence is largely emanating from so-called contract manufacturing and product-design service firms that specialize in the production of prototypes, components and finished products on behalf of other concerns.

The sector—as is so often the case in Silicon Valley—is flourishing based on the region’s unique alchemy of talent from its great universities and entrepreneurial population, plus the exceptional access to venture capital. It also is benefitting from several exogenous influences, including rising wages in China, concerns about intellectual property theft and transportation costs.



George Korolog

Contract manufacturers are hiring, buying equipment and expanding considerably faster than area manufacturers in general, according to industry sources and “Contract Manufacturing in Silicon Valley,” a report completed earlier this year for work2future, a local workforce and economic development organization. “The employers we interviewed reported growth of about 15 percent in 2011, compared with 3 percent employment growth among all manufacturers in the region over the same period,” said Josh Williams, president of Carlsbad, Calif., -based BW Research Partnership and lead researcher behind the study.

In addition, the companies expect employment growth of around 20 percent this year, compared with manufacturing in general, where employment is expected to contract 3 percent. While the research group interviewed only 16 of the area’s approximately 91 contract manufacturers, Williams said he felt confident that their comments reflect a larger pattern, and interviews with multiple companies buttress his belief.

Typically, an original equipment manufacturer will design a product then hire a contract manufacturer to make, assemble and ship it. The practice is especially useful in Silicon Valley, where startups may lack the expertise or facilities to perform the latter three functions. In total, contract manufacturers employ not quite 7,600 workers in Santa Clara County—compared to 159,000 in manufacturing overall, according to the report.

“Customers tell us, ‘We don’t want to build overseas anymore because we are afraid our intellectual property will be compromised.’” Rich Walkup, executive vice president, Rocket EMS Inc.

“Product development right now is very important in the Bay Area. We are on the next wave of some important product-development cycles within medical devices, the cleantech industry and defense work,” Williams said.

One company aggressively adding space is Rocket EMS Inc., which launched in San Jose in January 2011 with five employees. Since then, it has added 95 employees, and \$3 million in equipment and expanded by 20,000 square feet. A circuit-board assembler, Rocket plans to add 10,000 more square feet this year, building out its current space, said Rich Walkup, an executive vice president. The company is self-funded.

There was never a question about where the startup would launch. “We’ve all been in Silicon Valley for 30 years, and this is the most dynamic startup environment in the world,” Walkup said. Rocket devotes the lion’s share of its plant space to



manufacturing and maybe 5 percent to office and 5 percent to shipping, Walkup said. “We are seeing a pullback with our customers. They are no longer building in Asia; they are building here. As we build and finish the product, we are shipping overseas now right out of the United States.”

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Fremont also is targeting manufacturing as a primary element of its redevelopment plan for the area adjoining the Warm Springs BART station. “We are already a major center for industry. We have almost 40 million square feet that fall in the manufacturing and research and development category,” said Kelly Kline, Fremont’s economic development director. “We have had great success with that and want to build on it.”

Currently, Fremont is home to about 30 clean technology companies and 80 biotechnology companies, with the former including Tesla Motors Inc. and its sprawling 5-million-square-foot factory. Gilbert Passim, the company’s vice president of manufacturing, has been quoted as saying that the factory had 600 workers in April and is expected to employ from 1,200 to 1,500 by year’s end.

**dB Control Corp., which does both contract manufacturing and design work, has taken advantage of the bounty of Fremont space and is soon to expand. “Our main facility is 40,000 square feet. We have just signed a lease for an additional 12,100 square feet next door,” said Steven Olson, the marketing manager for dB Control. The new space will be an environmental test laboratory.**

**dB Control builds TWT amplifiers and high-voltage power supplies and does custom high-voltage assembly work. Its products supply the power to the radar on unmanned air vehicles. “We’re on platforms like the Predator Reaper, which allows an aircraft to be flown 10,000 miles away while the pilot sits in Nevada and watches what’s happening in Afghanistan,” Olson said. Even if it’s pitch dark, the radar makes it possible for the remotely located pilot to see what’s happening—and dB Control’s products supply the power to that radar.**

**Because dB Control’s products are mission-critical, the company should continue to grow despite cuts in defense spending. “We had \$25 million in revenue in 2011, and we have grown 20 percent per year for the last eight years,” Olson said. “We have 130 employees and are currently hiring.”**

George Korolog, a senior vice president at Sanmina-SCI Corp., said, “The biggest thing driving our growth is that we are working in some markets that are doing very well today: alternative energy, gas and oil, aerospace.” At the same time, the global giant continues to serve the telecommunications, communications and semiconductor markets, where demand is stable.

Headquartered in San Jose, Sanmina is a global electronics manufacturing services provider that makes a huge variety of products, among them printed circuit boards, cables and machining parts. Its last fiscal year revenue was \$6.6 billion, and it employs about 45,000 people worldwide. Besides manufacturing, the company also does “integration.” “Integration is not just putting parts together but testing those parts through a different test system to make sure they are working,” Korolog said.

Sanmina has about 4,500 people in the Bay Area—in Fremont, Newark and San Jose—and the company’s plants occupy more than a million square feet, most of it dedicated to manufacturing. Sanmina has expanded its Newark and Fremont plants, adding at least \$2.5 million worth of specialized equipment in the last 18 months. It also has hired 50 people in that time and is aggressively seeking workers with specialized skills. “I would hire five certified welders tomorrow if I could find them,” Korolog said. Expanding his company’s real estate footprint probably won’t be necessary until the global economy gathers greater momentum.

Mark Crompton, director of business development at San Jose-based contract manufacturer CTS Corp., said companies want to outsource manufacturing so they can focus on product development. CTS designs and makes sensors, actuators (a type of motor) and electronic components and provides value-add electronics manufacturing services. It has manufacturing operations throughout North America, Europe and Asia, pulled in \$589 million in revenue in 2011 and employs around 5,000 people worldwide including 300 in the Bay Area. “Another driver of our growth is the overall market for electronics, which is still going strong. The other is the level of outsourcing a lot of people are doing,” Crompton said.

Transit time also is driving customers to contract for manufacturing in the United States rather than overseas. “Even if you get it on an airplane, you probably have items in transit a minimum of seven, maximum of 15 days from when they leave the factory in China and get to the factory here. In that time, things change a lot. Many of our customers in San Jose are managing changes on a day-to-day basis,” Crompton said.

The company’s roughly 80,000-square-foot plant is mostly manufacturing space with a small amount devoted to warehousing, shipping and receiving. As is common with such firms, it also has an assembly line. “This space is 30 percent bigger than the one we had in Santa Clara five or six years ago,” Crompton said, and it is not looking to expand its footprint anytime soon. “We rented a larger factory than we needed because we anticipated growth. I don’t anticipate needing additional space, but every project coming in could create a new need,” he said.

Contract manufacturers fill an important niche in the valley, especially for cleantech companies, said Kim Walesh, San Jose’s director of economic development. Unlike some semiconductor makers, cleantech businesses are not interested in creating their own operating facilities. Instead, they want to focus on

R&D and managing the commercialization process. “Contract manufacturers know how to operate production lines efficiently to optimize the output for the time and expense put in,” Walesh said. “So, by contracting with a contract manufacturer, the whole process of taking an idea from a prototype to an actual product can be done much more quickly and cheaply.”

Walesh is planning a conference for late summer or early fall to bring together all the different manufacturers in San Jose. “They (manufacturers) have expressed interest in coming together to discuss the state of manufacturing, as well as policies that perhaps could be changed at the state and local level,” Walesh said. She has also met with the valley’s manufacturers and is busy matchmaking between them and potential customers.

Photos by: Chad Ziemendorf

