For Tad Yamaguchi, new chief engineer, success has been a combination of 14 years of working on high-density and long-standing social tradition. Tad — who is 30 years old and has received a Ph.D. in electrical engineering — has published over 60 technical papers, and was the recipient of the IEEE's Third-Rank Port Award for his invention of the solid state electronic devices — but believes that being an electrical engineer is being able to visualize what he wants to do.

"It's an imaginary world that can only be created by creating imaginary models," he says.

Born in Miyazaki, about 700 miles south of Tokyo, Yamaguchi developed when he was 12 years old and a teacher first lectured about electron devices. Tad received his BS degree in Electrical Engineering in 1989 from the Miyakojima Institute of Technology. For three years he was engaged in the construction of a $20 million facility for IC fabrication, which Tad also manages.

Tad has been working on different phases of bipolar technology. The fastest generation had been in Tad's first prototype stage, having taken four years to develop, one in which a construction of a $20 million facility for IC fabrication, which Tad also manages.

Since Japan is such a unified society, the cultural push to succeed is always there, despite performance. "I don't think I have to compete with anyone," he observes. "I remember driving myself to succeed and being at the 90th percentile. I would get into the 80th grade but myself. That willingness to internalize and not react to disappointments drove me to get "A" plus."

In Japan — in addition to a competitive work place — the work does not end at five o'clock. Employees are expected to socialize with their co-workers to maintain a sense of "family spirit." This is an effort to form an atmosphere of "ki" that permeates the workplace. "I'm in a strong family where everyone, including parents and society, is expected to be a social person. I think to go a top university will mean a ticket for success for one's entire life."

Tad has the unique perspective of having been raised and educated in one of the world's two industrialized nations, and of having worked in the other. For him, Japan's business success is a result of its traditional culture as shown in corporate efficiencies:

- Parental respect. "Fathers and mothers often say goodbye to their children and "when you see your children, you can see that they are suffering."
- Parents don't necessarily repeat this.

Other chiefs

Other Tektronix chief engineers and scientists are Agaton, a Swedishman; Andrews, Graeme Boyle, Phil Crosby, Gordian Williams, and Hulhul Ochens. Ling Sun, Guth, Amel, Chuck Sacks, Mayer Schwartz, Tran Thong.

request, instead the trust the child to see if the parent is willing to lead. When I did well in school, all they said was that I had done a good job and that I was a good kid. That's all.

- Trust. "When you graduate from school and go to work for a company, you build trust in that group by doing a good job and a sense of work to make money; in Japan, it is to make money and to be a trusted member of an extended corporate family. In America, social relationships act as the foundation for the atmosphere of family within the company. There is a shift in the transition from their biological families to corporate ones, they do so with the result of the relationship is very different."

- Morality. "In America, children are raised to be confident that they can do a job. Teenagers will try to come up with solutions to the task at hand. And when they are hired, it's with the expectation that they will be successful. The Japanese are not. In Japan the opposite is true, where young people are always over-reliant on the guidance of others. Even now PhDs believe that the first five years on the job is a continuation of their education. Managers must, however, be able to teach. If they cannot, respect will not follow; if they can, their work will follow them forever."

With respect to America the right de
cision for Tad? "The early results look good," he says, noting that decisions are made as a group. The result is that each member of the group is responsible, which is the real result and is bad when bad is good and vice versa.

"Once I make a decision, I do my best to make sure that the group gets the result of my decisions becomes the right ones. That's my basic philosophy."

"Charles Martina"