ST's Strength

**An Interview with Carlo Bozotti,
President and Chief Executive Officer, STMicroelectronics**

Carlo Bozotti

EDITORS' NOTE *Carlo Bozotti has held his current position since March 2005. He is the sole member of the Management Board and chairs the company's Corporate Executive Committee and Corporate Strategic Committee. Bozotti also serves as Vice-Chairman of the Board of Directors at ST-Ericsson SA. He joined SGS-ATES (later renamed SGS Microelettronica), a predecessor company to STMicroelectronics, in 1977. Ten years later, SGS Microelettronica of Italy merged with Thomson Semiconducteurs of France and is today STMicroelectronics, which is among the leading semiconductor companies worldwide, Bozotti became General Manager of the Telecom Product Division and, subsequently, he was promoted to Director of Corporate Strategic Marketing and Key Accounts, and later, to Corporate Vice President, Marketing and Sales, Americas. In 1994, Bozotti was appointed Corporate Vice President for Europe and the Headquarters Regions. From 1998 to 2005, he served as Corporate Vice President and General Manager of the Memory Products Group. In 2011, Bozotti began a second (nonconsecutive) term as the President of the European Semiconductor Industry Association (ESIA). He graduated with a degree in Electronic Engineering from the University of Pavia, Italy.*

COMPANY BRIEF *STMicroelectronics (www.st.com) is a global leader serving customers across the spectrum of electronics applications with innovative semiconductor solutions. ST aims to be the undisputed leader in multimedia convergence and power applications leveraging its vast array of technologies, design expertise, and combination of intellectual property portfolio, strategic partnerships, and manufacturing strength.*

Where is ST Microelectronics positioned in global markets?

In the semiconductor business, we make chips and provide our customers with solutions on a global level. The semiconductor market is approximately a $300-billion market and we serve about 60 percent of it. We are number three worldwide in that market and we are number one, two, or three in most of the things we do.

We do about 30 percent American accounts, 30 percent Asian, and 40 percent European. The weight that we have with non-European customers is already the lion's share. About 55 percent of our revenues are with Asian-based customers.

At your size and scale where there are a handful of competitors, how challenging is it to differentiate in the space?

As far as ST is concerned, there are two main differentiating factors: the pace of innovation and our ability to provide customers with complete solutions and not just products. In terms of innovation, the most important indicator I can give is the intensity of the work we are doing. In the past years, R&D accounted for a significant portion of our budget – as high as 23 percent of our revenues in 2010, which is impressive.

There are two main areas where we are investing R&D money: the first is wireless and consumer platforms – we call this multimedia convergence, where the concept is providing consumers with information from the Web and at the same time with great entertainment on any device in any place at any time. This is for us the smartphone business and high-end TV; this is one block of our strategy.

The second block – what we call "Sense and Power" – is around a variety of power applications including automotive and in home appliances. And there is more for alternative energy solutions where the common denominator is energy saving. This block also includes everything regarding sensors.

Our vision is to be the undisputed leader in these important sectors in the semiconductor field. And leadership in these fields will allow us to capture growth in our traditional markets and in four important new growth markets: energy management and savings, smart consumer devices. trust and data security, and health care and wellness.

In Sense and Power, we have traditionally grown organically. Multimedia convergence is more challenging and the intensity of R&D is so strong that we decided to combine forces in a joint venture that we established with the Ericsson group.

As you grow, how challenging is it to retain that innovation edge and to remain a leader?

You need to define the areas where you want to be a leader and focus on them. Innovation is also about having critical mass. You cannot compete in wireless, or in any field for that matter, if you do not invest. We have the critical mass to succeed in any of the areas we have chosen to operate in, including the ones that have the most intensive focus in terms of R&D investment.

The third element, after the definition of the areas and the critical mass, is making sure you nurture innovation throughout the company, which goes beyond pure R&D effort. For instance, we have a technology council where contributing professors look at our progress and we have an internal organization that is looking at the advantages of technology. We have innovation teams of every size where we operate. Speed is of the essence, and innovation goes hand in hand with speed.

Of course partnerships are important in the area of technology. We are partnering with the International Semiconductor Development Association and IBM, among other global players.

How important is giving back to society and how do you decide which areas to focus on?

One example is that we want to contribute by continuously reducing our energy consumption; in this field, we have a track record of 5 percent reduction per year per unit of product since 1995 when we first started our environmental effort.

Another example is how we enable the efficiency of solar panels to be boosted: we have developed complete solutions that implement precise photovoltaic panel control that includes for instance an algorithm to search for the best working point of the panel and maximize the produced energy under all environmental conditions.

We also have other initiatives inside the company aimed at our people in terms of social responsibility. For instance, we provide free medical check-ups for our employees to protect their health, particularly in developing regions such as Asia and at our plant in Morocco. More generally, I believe electronics and semiconductors specifically will become increasingly more important in the worldwide health care business. For example, you can conceive of the human body fitted with a number of sensors opening up the prospect of remote patient monitoring. In fact, health care, along with energy saving and security, provide excellent examples of how our technologies and solutions are helping to address some of the most important challenges facing society. ●