

Platform that Unifies Sony Group Semiconductor Production Sony Semiconductor Kyushu Corporation Established

Sony has created a manufacturing platform that can more directly connect our customers with Sony's semiconductor production in Kyushu, which is now known as Japan's "Silicon Island." Silicon Island's brains are now evolving.

On April 1, 2001 Sony combined its semiconductor manufacturing bases in Kyushu (Sony Kokubu Corporation, Sony Oita Corporation, and Sony Nagasaki Corporation) and the Kumamoto line currently under construction to form a new company, Sony Semiconductor Kyushu Corporation.

To respond swiftly to the rapidly changing business environment, Sony has been refining its EMCS (Engineering, Manufacturing, and Customer Services) concept, which aims at forming a design and production system appropriate for this new digital age.

The establishment of this new company instantiates this concept in the semiconductor field, and allows Sony to manage, in an integrated manner, the sequence of processes from development and design, through materials procurement, manufacturing, quality control, and sales, to customer service. In particular, it allows Sony to achieve improved efficiency, speed, and quality in semiconductor production.

Furthermore, it provides horizontal control of the other semiconductor bases in the Sony group, both in and outside Japan. These include Sony Computer Entertainment Inc.'s Fab1/Fab2 lines in Nagasaki, Sony Semiconductor (Thailand) Co., Ltd., and Sony Electronics Inc. Sony Semiconductor of America (San Antonio). Thus this new company has started its worldwide activities as a platform company that takes charge of semiconductor production operations for the whole Sony Group.



Nobuhiro Hamasaki
President and Chief Operating Officer
Sony Semiconductor Kyushu Corporation

Sony Semiconductor Kyushu Corporation

Competing with the World from Kyushu

Directly Reflecting Customer Desires at the Manufacturing Site

Expressed as briefly as possible, the purpose of establishing this new company was to create a consistent platform for all aspects from development and design to deliver to the customer. This is truly the EMCS (new design and production system) that Sony is aiming for.

At conventional production sites, the focus is the establishment of production technologies inferior to none. Here, the customer's voice is only heard indirectly. However, in the future, we would like to provide added value to our activities by taking on customer service ourselves, directly responding to our customers, and by reflecting our customers' desires even more in the production site.

We feel that being able to hear our customers' voices directly, even if they are critical, is a positive thing. This will give us the ability to detect even nuances such as "put a bit more spice in the broth," and will energize the workplace.

It goes without saying that unification will have the merit of speeding up the decision process and that the concentrated purchase of raw materials will increase our cost competitiveness.

A Business-Oriented Organizational System

Basically, there will be no changes in the items produced at each center. However, customers will no longer see Sony Semiconductor Kyushu Corporation plus different local companies such as Sony Kokubu and Sony Nagasaki, but instead will see Sony Semiconductor Kyushu, which will have divisions such as the MOS division, the video device division, and the mounting division. That is, this is a business-oriented organization. The chain of command will be unified in all cases and the company as a whole will be able to respond with its total power to our customers' desires.

Each center will take responsibility for its major issues, such as environmental issues, to create a company that will be well-thought of by its surrounding communities.

However, since local residents have their own characteristics, for example residents of Nagasaki are thought to be liberated, and residents of Kagoshima are thought to be tenacious, we have no intention whatsoever of imposing a unified corporate culture on these centers.

Sony Semiconductor Kyushu Corporation

EMCS semiconductor system: The industry's most powerful platform

● Headquarters (Fukuoka)

Headquarter functions
(Management strategies, total SCM, integrated quality control)

● Kokubu Technology Center

Commodity business base
(Video devices (CCD/LCD), MOS ICs, bipolar ICs)

● Nagasaki Technology Center

MOS commodity business (MOS ICs)

● Oita Technology Center

Semiconductor mounting business base
(Leading-edge IC assembly and mounting technologies)

● Kumamoto Technology Center

(Current under construction. Completion planned for fall 2001.)

Commodity business base
(Leading-edge video devices (CCDs and LCDs))

● Sony Computer Entertainment Inc.

Fab1/Fab2

● Sony Semiconductor (Thailand) Co., Ltd.

● Sony Semiconductor of America (San Antonio)

Kumamoto Technology Center
(under construction)



Nagasaki Technology Center



Headquarters (Fukuoka)



Oita Technology Center



Kokubu Technology Center

What We Wanted to Say with Our New Name. And Why We Resolved to Use These Words...

Actually, when we were deciding on the name of the company, some were of the opinion that we should not include the word semiconductor, and go with just "Sony Kyushu," and there were others who felt that including the name Kyushu would give a regional impression. However, we resolved to use both these words, despite the misgivings of some, and to instill great significance in them.

The role played by semiconductors in the functions provided by end products is becoming more and more important. We are committed to providing technological prowess not available from other companies in the semiconductor area. Once we realized these points, it became impossible to remove semiconductor from the name. Furthermore, we have a strong awareness that it is this region of Japan, Kyushu, itself that provides us with added technological prowess to compete with the world.

Kyushu is called Japan's "Silicon Island," and already has a broad-based infrastructure for semiconductor-related industries. It is a region with an extremely high degree of combined industrial prowess, from parts to manufacturing equipment.

Furthermore, recently industry, government, and academia have begun working recently together in a variety of projects to provide superlative "brains" for this Silicon Island, by adding development and design functions to Kyushu's superlative industrial environment. This is truly in complete agreement with Sony's corporate policy of aiming for an "intelligent manufacturing business." This has been warmly welcomed.

Furthermore, Kyushu has relatively stable employment patterns as compared to Japan overall, and thus is an appropriate region in which to accumulate technology and experience. With today's short product cycles, success in the market depends crucially on how fast products can be developed and brought to market. From this standpoint, since this is a region where it is easy to accumulate experienced personnel and technology, Kyushu meets all the conditions for a region that compete on a worldwide level.

Changes in Japan's Culture of Respecting the Production of Material Goods

Production technology is an area in which we take pride in our abilities, and an area where we already lead the industry in the world. One example is Sony's use of 0.18

µm design rules, and another is the point that the production facilities at the Kumamoto site, which will come on line this fall, were built assuming that we would be using 300 mm diameter wafers for the first time in the industry.

Furthermore, there will be increasing opportunities to share the know-how we have accumulated at each of these production sites with other sites.

The sense of Sony as a truly unified corporation does not stop at Japan's borders. To unify its operations with its production sites in the US and Thailand, Sony, of course, has many close international contacts and exchanges. We expect these exchanges to reach a scale in which over 1000 people travel between Japan and other countries, and that these will even include production line equipment engineers, a group who until recently had little direct contact with our foreign sites. Although extreme, I know of one case where an employee who had never even been in an airplane was called from America, and went alone at once. Our horizons are rapidly expanding. Also, we are in direct contact with our customers. We are working with people from around the world while basing our operations in Kyushu. We believe that such experiences can lead directly to strengthened technological prowess, and that they can become a motivating force to help us better respond to our customers.

Sony's EMCS Concept (Engineering Manufacturing and Customer Services)

This concept is intended to form a platform (a shared design and production system) that achieves improvements in production efficiency and product quality. It also aims at establishing a flexible and speedy management structure that can respond to the radically changing business environment.

Towards True "Zero Emissions" Manufacturing

Sony is achieving zero emissions (a recycling ratio of 99%) at all of its semiconductor production facilities. Of these facilities, the Nagasaki Fab1 facility is achieving a 100% recycling ratio, and the Kumamoto factory, which is currently under construction, is designed to achieve a 100% ratio as well. Sony has made it a corporate policy to bring our other facilities up to the 100% level so that we really are a literally "zero emissions" manufacturer.

The Sparkling "Sun 燦 Dazzling) Island"

Sony Semiconductor Kyushu Corporation intends to be a company that continues to dazzle as it faces the world. In particular, Sony aims at cooperating with localities to support the growth of Kyushu as a whole. Sony Semiconductor Kyushu Corporation expresses this intent with the catch phrase "Sun 燦 Dazzling) Island," and uses that as the title of a company-internal publication.

