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New Year's Greetings

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It gives me great pleasure to offer greetings on the dawn of the year 2008, and to share some of my thoughts at the beginning of the year.

The Japanese economy had seemed to be recovering. However, according to the monthly economic report for last year announced by the Cabinet Office, the figures throughout the year were weaker across the board than comparable figures for the previous year. The continuing rise in the price of oil is a concern. In the 20th century, economic activity based on mass production and mass consumption propelled the Japanese economy. In the new century and in a global society, however, this must be reexamined in the light of the remarkable pace of economic growth in developing nations, the insufficiency and skyrocketing price of petroleum and other raw materials, the environmental issues that are becoming more serious on a global scale and so on. For this reason, studies are underway in an effort to determine how human beings can create sustainable development that achieves a balance between environmental concerns and economic activity. Various proposals have been offered, including a report entitled "The Key to Creating Innovation and the Promotion of Eco-Innovation" released by the Ministry of Economy, Trade and Industry.

The Micromachine Center is currently engaged in research and development of microelectromechanical systems (MEMS). Up to now, the Center has produced first-generation sensors and other single-function devices that focus on miniaturization and increased reliability, as well as second-generation devices (fine MEMS) with even more advanced functions. This year marks the start of the Project to Develop Technologies for the manufacture of Next-Generation Devices that Fuse Different Fields. The goal of this project is to create third-generation MEMS devices (named Bio Electro-mechanical Autonomous Nano Systems, or "BEANS"). BEANS are expected to find applications in a variety of new fields in addition to existing application fields, including environment and energy, safety and security, health care and medical treatment and so on. It is hoped that BEANS will lead to technologies that can support the sustainable development of humanity.

The MEMS market in Japan is expected to expand at a rapid pace. According to a study commissioned by the New Energy and Industrial Technology Development Organization (NEDO) and conducted by the Micromachine Center, the MEMS market was JPY 440 billion yen in 2005 when first-generation MEMS devices were the driving force. By 2010, when the second-generation MEMS devices appear on the market, the market is expected to grow to JPY 1.17 trillion yen. And in 2015, when third-generation MEMS devices will hold sway, the market is expected to grow further to JPY 2.4 trillion yen.

The Micromachine Center pursues research and development with a view to the future, in order to achieve progress for the MEMS industry. The Center works diligently at a variety of activities aimed at supporting MEMS industry growth and stimulation. One such activity that is important in terms of strengthening international competitiveness is international standardization. Last year, the Micromachine Center initiated activities as an advisory group in Japan in the MEMS industry. As a result, the role and responsibilities of the Micromachine Center in the industry is expected to become even more important.

The Micromachine Center will continue to pursue activities aimed at establishing basic technologies for micromachines and MEMS and achieving industrialization.

On behalf of the Micromachine Center, I hope we can count on your further understanding and support. It is our heartfelt wish that this year will be a rewarding one for you all.