

JOURNAL OF KOREAN January 2007

ELECTRONICS

Published by KEA http://www.gokea.org / Edited & Designed by BCS.Com Tel: (82-2) 6258-7870

New Year Message from the Chairman

Maximize Value Creation with Creative Innovation



Dear electronics industry family members at home and abroad:

The hopeful new year has dawned. 2007, in particular, is the luckiest 'Golden Pig' year among all the past years of pig, according to the

oriental zodiac. I wish 2007 would become a year full of luck for all of you and also a year for your strong take-off.

Last year, our electronics industry recovered vitality in the national economy and a new hope for the future with a double-digit export growth after overcoming difficult economic conditions, foreign exchange rate fall, high oil prices, etc.

These remarkable achievements, I think, are the fruit of the efforts and passion dedicated by all of you, ranging from workers on production scenes to top management executives.

Electronics industry family members!

Projections by experts are that also in 2007, the external and internal environments surrounding our electronics industry will not improve much either. However, I are sure that our ceaseless challenging spirit and indomitable endeavor will enable us to tide over any hardships and to write a new history of our electronics industry.

With one-step more advanced idea and create innovation, let's make 2007 become a year that we strengthen the global competitiveness of our digital industry and do our best in realizing our dream -- US\$300 billion in exports and the world's third strongest electronics nation.

By creating 'Blue Ocean' moving our customers at every nook and corner of the global village through quick response to the rapidly changing paradigm of the world economy, I believe that we can reinforce 'Digital Korea Brand' further.

I also sincerely ask you to dot your best in enhancing industrial competitiveness, technology, quality and design of our products, through diversified cooperation between the government and enterprises.

On this occasion, once again I wish all electronics industry family members development and good luck, while assuring you of KEA's strenuous efforts for business innovation and service improvement to resolve the tasks and pending issues of our industrial community, including technology innovation, environmental management, patent solutions, win-win management between large enterprises and SMEs, corporate social responsibility and ethical management.

On the first day of 2007,

Yoon Jong-Yong Chairman Korea Electronics Association (KEA)

Next-Generation Growth Engine

Korean Race to the Secondary Batteries



The secondary battery is a high-value-added product that can match semiconductor and the LCD. The use of the rechargeable battery is getting wider with new applications like wireless electric tools and hybrid

cars as well as its traditional use for such portable electronic devices as the PDA, laptop computers and mobile phones. Another factor that fuels the competition among related manufacturers is the prediction that it is going to be hard to develop an alternative energy source to replace the secondary battery for the next few years.

So, the value of the secondary battery worldwide is expected to increase from its current level of \$ 5 billion to \$ 6 billion in 2008. The hybrid cars and electricity-powered bicycles are set to become a new customer base that will grow rapidly with its demand for middle- to large-sized batteries.

The secondary batteries are reusable in an almost unlimited time span, unless they lose their electric-chemical originality. There are the Pb battery, the Ni-Cd battery, the Ni-MH battery, the Li-ion battery, etc.

In Korea, the secondary battery is expected to become one of the nation's representative next-generation industries. To cash in on the booming digital consumer electronics field, there is a powerful trend towards a smaller-size and highercapacity product. Amid these conditions, an intensified competition is being staged among the nation's battery manufacturers.

The rapid rise of these Korean companies has put the Japanese companies on alert.

In the world's secondary battery market, Sanyo and Sony compete each other for the No.1 spot, while LG Chem, Samsung SDI, Japan's MBI and China's BYD are competing with one another for the No. 3 spot.

Hyundai Motor and Kia Motors will start producing a limited number of hybrid automobiles exclusively for the Korean government in 2007.

The government and the auto industry are about to complete their testing and researching of gasoline-electric cars this month, as part of the first phase of launching the vehicle in Korea.

The government and industry began researching and developing the hybrid in 2004, sources say.

In phase two, the government will further subsidize Hyundai and Kia, Korea's two largest automakers, to develop and manufacture models on a small scale until

Under the plan, Hyundai Motor will produce the Verna, while Kia Motors will make the Pride, both subcompact hybrid sedans.

Sources say government and auto officials will raise the fuel efficiency standard to 20 kilometer per liter from the current 18.5 for the two cars.

A hybrid car runs on gasoline and electricity simultaneously and is considered the next-generation, fuelefficient and environmentally friendly vehicle.

The cost of the hybrids is expected to be affordable, analysts predict, as the government is fully backing the project.

The government will invest a total of 38.9 billion won (\$41 million) in hybrid vehicles. This means that it will chip in about 14 million won per car.

It will also purchase over 3,300 units over the next two years during the second phase to pretest the hybrids before they can be marketed nationwide.

Hyundai-Kia officials added that they have developed a hybrid vehicle that emits a low level of carbon and meets today°Øs environmental standards.

Lately, global automakers are getting ready to produce cars that can run on eco-friendly alternative fuel like biodiesel or hydrogen amid volatile oil prices.

GM Daewoo, Korea's third largest automaker, is tapping into diesel-powered cars like the Tosca and Winstorm.

General Motors, currently the world's biggest auto company, said that over the next several years it will release hybrids that can recharge by plugging into home electricity

Toyota, the No.2 global automaker, is expanding the development of alternativeenergy vehicles using hybrid and fuel cell technologies. Toyota launched its first hybrid in the late 1990s. Some 48,000 Camry hybrids are expected to be manufactured by the Japanese carmaker in the first part of next year.

'KES 2007' Roadshow in USA Successful



On January 9, KEA held the first overseas roadshow of KES 2007 at LVCC conference room of the largest IT exhibition 'CES 2007' in Las Vegas in the United States and completed the event successfully. The roadshow was designed to enhance recognition of KES 2007 brand and induce global IT enterprises.

About 110 persons from major local and Korean media, ABC, AFP, Joongang Ilbo (U.S. branch office), Herald Media and Aving Korea, including 90 IT exhibition-related enterprises from the U.S., Japan, China, Taiwan, attended the roadshow and expressed their great interest in KES that is growing remarkably into an electronic exhibition to represent Asia.

KEA explained its plan to hold KES 2007 and the exhibition's medium and long-term vision amid the participation of KEA Executive Vice Chairman Lee Gam-Yeol and related officials from co-hosters of the road show, the Ministry of Commerce, Industry and Energy (MOCIE), Gyeonggi Province and KOTRA.

With the Las Vegas roadshow held during the CES period as start, KEA plans to make efforts continuously for globalization and upscaling of KES with holding its roadshow also in China, Taiwan, Europe, etc. by the first half of 2007.

KEA Launches e-Guaranteed Settlement Service



To activate its electronic parts e-marketplace (www.epartshub.com), established and operation under the support of the Ministry of Commerce, Industry and Energy (MOCIE) and to

ensure safe B2B e-transactions, KEA launched e-guaranteed settlement service on January 2, 2007.

For implementation of the service, KEA recently concluded an MOU with Korea Credit Guarantee Fund (KODIT) for cooperation in online transmission and reception of edocuments, operation of e-gurantee certificate, provision of B2B e-commerce loan guarantee service, etc.

Under the system that KODIT provides e-guarantee certificates, and banks implement e-settlement service through loans to related SMEs by utilizing the certificates, 100% payment settlement is guaranteed for those firms that sell goods.

Patentability Judgment/Ruling System Training



The Patent Support Center of KEA conducted training theme 'U.S. the Patentability Judgment and Ruling System December 11~13 at the Training Institute Korea

Productivity Center (KPC) in Icheon, Gyeonggi Province.

The three-day training program was prepared in order to help domestic enterprises better understand the system in the U.S., Korea's major export market, and a country where they are experiencing many hardships at the same time in the course of filing of their patent applications and patent lawsuits.

Take Photos in the Dark Without a Flash



Korean Planet 82 debuted an image sensor chip at the 2007 Consumer

Electronics Show (CES) that allows users to take photos or video in the dark without using a flash.

The world's first full-color, highsensitive imaging chip is 2,000 times more sensitive than a traditional CCD chip in a digital camera.

Planet 82 calls the chip SMPD, which stands for Single carrier Modulation Photo Detector.

The company did not say when the technology would be available in a commercial product.

Headquartered in Seoul, Korea, Planet 82 is a global leader in nanotechnology. In 2003, Planet 82 acquired the patent and intellectual property rights to mass produce nano photodiode and nano biotechnology services from the Korea Electronics Technology Institute (KETI).

Korea to Adopt Digital Radio Broadcast System

The Korean government is set to launch a committee to accelerate the application of digital technologies to the nation's radio broadcast system. There are currently 51 radio broadcasters in Korea, including regional-based stations.

The committee will consist of three working groups, each discussing technological requirements, legal framework and industrial demand. It will focus on the future technology standard, particularly regarding transmission frequency band, sales of capable terminals, re-division of broadcasting areas, and legal issues, as well as the most appropriate timing to digitalize the national radio broadcast system. About 18 experts from industry, academia and research institutes will work for the committee.

However, there are still a number of problems to be resolved, including the technology standard decision of whether to use Europe's Digital Audio Broadcasting or the U.S. In-Band On-Channel (IBOC) standard.

The digital radio broadcast system is expected to provide CD-level high-quality stereo sound and data services. It will also help create renewed market demand and develop related industries. Electronics makers, for instance, will likely develop and market digital radio devices.

Samsung Electronics Sees Strong Second Half

Samsung Electronics plans to continue aggressively investing in semiconductors and displays this year, despite facing potential challenges in a stronger won and rising oil prices.

It has earmarked capital expenditure of 9.7 trillion won targeting sales of 63.6 trillion won this year, up 8% from 2006.

According to a Samsung investor relations specialist, the company's operating profits and earnings ratio in 2006 fell on the strong won and increased marketing costs. The company expects operating profits of 800 billion won in the digital media business this year versus 300 billion won last year.

This year it plans to boost sales of DRAM and LCDs, banking on 'Windows Vista' demand, and build 8G TFT LCD and 60-nano processing lines in the second half to improve cost effectiveness.

Samsung Electronics also plans to aggressively market LCD TVs, aiming to maintain its No. 1 position in the world market. It is expected to focus on large flat-panel TVs of 40 inches and larger, and increase the percentage of full HD models to about 50%. It also aims to secure a strong foothold in the 46-inch market by successfully deploying 8G. It sold 11 million units of LCD and 2.5

million units of PDP TVs in 2006.

The company also expects the earnings ratio of LCD panels to increase to around 10% in the second half of this year after a drop in the first quarter. It is likely to cut the price of its 40-inch LCD TV to less than 1 million won.

Samsung Electronics has decided to put DRAM at the forefront in the first half and NAND flash in the second half of this year. It expects DRAM sales to increase by more than 90% on Windows Vista and that of NAND flash to rise more than 30% on large-capacity MP3Ps, portable multimedia players and smart phones.