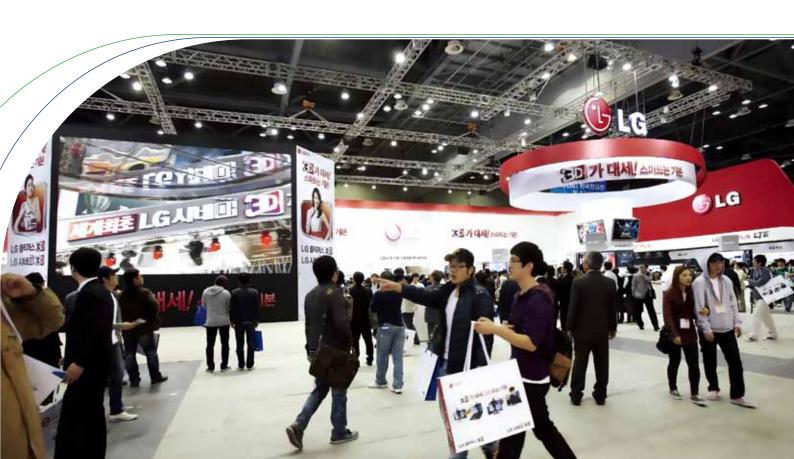


Be smArt!

2011 Report on

Korea Electronics Grand Fair

한국전자산업대전 결과





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2011 Report on

Korea Electronics Grand Fair

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04 Outline



Be smArt!

한국전자산업대전

Korea Electronics Grand Fair 2011

2011.10.12~15

Korea Electronics Grand Fair 2011 Outline

- Title

Korea Electronics Grand Fair 2011

- Date/Location

Date: Wed. Oct. 12 – Sat. Oct. 15, 2011 (10:00~17:00) **Location**: KINTEX (Ilsan, Goyang-si, Korea)

- Scale

 $\textbf{Dimension}: 53,541 \text{m}^2 \text{ (From 1 to 5 halls in first exhibition center at KINTEX)}$

Participants: 773 companies, 2,343 booths **Visitors**: 52,788 (including 2,153 foreign buyers)

Sales Fair Results: 1.7 USD in total

- Exhibition

Electronic telecommunications, semiconductor, display, electronic parts, display, software, IT convergence, electronic home appliances.

- Organization

Hosted by : 교통 지식경제부 (Global Inspiration 세계속의 경기도

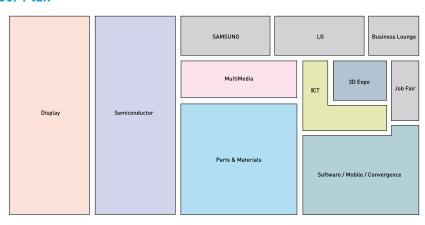
Organized by: Korea Electronics Association, Korea Semiconductor Industry Association,

Korea Display Industry Association

Sponsored by: KBS, MBC, SBS, Korea Economic Daily, MK Business News, Electronic Times,

NIPA, ETRI, KETI

- Floor Plan



www.kes.org Outline 05











Conference

- -Smart Korea 2011
- -Global Distribution Seminar
- -Consumer's Safety in Home Appliances
- -Technology Development Seminar for Green PC System
- -Technology Cooperation Seminar between Korea and Spain
- -2011 Technology Exchange Plaza between Korea and Japan
- -Education of Safety Standards in Semiconductor
- -Introduction of Smart Tools, Bistel
- -Global Packaging Technology Seminar, KSIA
- -Display Products Seminar, JWC
- -Standard Forum for Touch Screen
- -Leaders Forum for Analogue Semiconductors
- -Autumn Symposium of Korea Semiconductors Display Technology Association
- -Market Research Seminar for Semiconductor Device
- -System Semiconductor Vendor Seminar
- -Green Micro and Electronics Packaging Technology
- -Cloud Computing and Virtualization, CDIT
- -Plan and Design for Android Devices in Embedded System
- -2011 LTE Cooperation Seminar between Industry and Educational Organizations
- -Global Seminar for Outlook of Green IT Technology Trend
- -Digital Audio Interface Test, B&P International
- -Briefing Seminar of Promising Cultural Technology, KOCCA
- -Introduction of 3D Input Technology, Dae Shin Electronics
- -IMID. The 11th International Meeting on Information Display

Global Buyers Meeting

- -Trade Counsel of Electronics Parts in China
- -Trade Counsel of IT Products in India
- -Trade Counsel of IT Products in Philippine
- -Trade Counsel of IT Products in Nigeria
- -Trade Counsel of IT Products in Japan
- -Trade Counsel of CCTV Products in Austria
- -Trade Counsel of Electronic Products in Russia
- -Trade Counsel of 3D Products and Broadcasting Equipment in USA
- -Trade Counsel of Medical IT Products in Indonesia
- -Trade Counsel of Broadcasting Equipment in Mongo
- -Business Fair for System Semiconductor

Events

- -Job Fair
- -Gala Show (Dinner with global buyers)

06 Overview





The Three S, 2011 Korea Electronics Show as the global electronics exposition



The First S, Smart!

Under the slogan of "Be Smart!," the Korea Electronics Show [KES] 2011 was successfully held by the Ministry of Knowledge Economy, Gyeonggi Province, the Korea Electronics Association, the Korea Semiconductor Industry Association and the Korea Display Industry Association at the KINTEX of Ilsan near Seoul from October 12th to October 15th. The attendees for the opening ceremony were Yun Sang-jik, vice minister of knowledge economy, Kim Yeong-hwan, chairman of the Knowledge Economy Committee, Yun Jong-yong, chairman of the Korea Electronics Association, Kim Ki-nam, director of the Samsung Electronics General Technology Development Center and Kwon Young-su, president of LG Display. KES 2011 was a grand exposition where visitors were able to see the present and future of the Korean electronics and IT industry. The event displayed Korea's latest popular 3D and software solutions as well as Korea's world-leading electronic and IT products such as smartphones, cutting-edge displays and semiconductors on the floor space of 53,541 square meters.

The two main themes of this show were "Smart" and "3D" technology. Samsung Electronics and LG Electronics welcomed numerous visitors while publicizing their smart and 3D technologies and products. Samsung Electronics set up "Smart Monument" made up of 48 by 46-inch displays and 16 by 55-inch smart TVs which showed a wide variety of contents and smart life at the center of its 1,370-square-meter booth.

The 1,370-square-meter booth of LG Electronics was also a must-visit place as the booth exhibited smartphones and smart electric home appliances with complete 3D solutions. LG prepared a 370-inch super-sized 3D LED screen and 20,000 pairs of 3D glasses to give visitors opportunities to experience the latest 3D technology. The festival entertained visitors with a 3D game zone, Brain Racing to develop concentration power for children, a creativity development program and the 3D Film Festival in partner-ship with Yeongdeungpo CGV which included Transformer 3 and 3D Movie Hall in the exhibition hall.

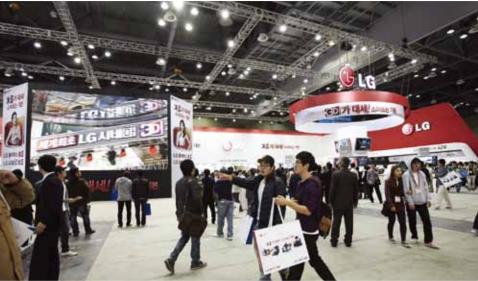
The Second S, Software: When Hardware Meets Software

The key word of the KES 2011 was "When Hardware Meets Software". This event considerably expanded the "Software and Mobile Hall" which will be a key factor in enhancing the competitiveness of the electronic, IT and platform industries of Korea during the smart era that will change the paradigm of businesses and industries.

A total of 60 software companies exhibited a mobile platform, a security solution, a web-based reporting solution, a CAD mobile office program, a virtualization solution, an industrial OS-based fastboot solution, a 3D speech organ simulator, a smartphone black box and a hiking navigation application to meet with hardware companies.

www.kes.org Overview 07





Products and solutions of 30 companies included the world's first transparent showcase, a robot cleaner with a navigation camera and an application test automation solution were exhibited in the IT Convergence Hall. The Broadcasting Equipment Hall, under the slogan of "Broadcasting is 3D, Too", attracted visitors with cutting-edge 3D software broadcasting solutions such as the "Tornado 3D," real-time broadcasting graphic solution, glassless 3D displays and software that converts mobile contents into 3D formats.

The Third S, Sales Fair: "Biggest Business Exhibition in Asia"

The KES 2011 has positioned itself as the "biggest business exhibition in Asia" with participations of Samsung Electronics, LG Electronics and other world-class companies such as Taiyo Yuden, Merck, Hynix Semiconductor and Samsung Electro-Mechanics and global companies in the parts, manufacturing equipment, distribution, software, design and contents sectors. The KES 2011 was visited by major buyers from emerging markets such as China, India, Russia, the Philippines and Indonesia. China's top 100 companies, 11 Russian companies such as the Delta Group and seven U.S. companies including the Pacific Group held business meetings with Korean companies through the KES 2011. In addition, Korean companies discussed business deals with buyers from India, the Philippines, Nigeria, Japan, Australia and Indonesia.

In particular, the KES 2011 recorded business deals amounting to USD 1.7 billion, the highest figure thanks to the participation of buyers from the BRICs which expanded their coffers by selling natural resources and oil. Other companies and organizations that participated in the sales fair were international B2B trade hubs such as the Broker Forum, Hong Kong Inventory, Huaqiang Bei of China, Chip-1Stopn from Japan, Future Electronics of Singapore and Parts Finder from Korea, global IT product manufacturers and those in charge of procurement from governments, hospitals, schools and reliqious groups.

In addition, the official Gala Show presented various traditional Korean cultures and art performances with the participation of 500 global buyers, representatives of participating companies, officials of the central and local governments, offering an opportunity to form networks between foreign buyers and Korean companies.

The KES 2011 prepared halls with various themes such as design, contents and distribution while injecting new energy into the global business market by offering next-generation growth engines such as new software, 3D technology, digital broadcasting, green PCs and investment information.







▲ Yun Jong-yong, Chairman of the Korea Electronics Association (left), Yun Sang-jik, Vice Minister of Knowledge Economy(second to the left) and Jeon Sang-hwon, CEO & President of the Korea Electronics Association(middle) are enjoying the latest 3D technology.

Opening & Gala

Shortly after the opening ceremony of the KES 2011, Yun Sang-jik, vice minister of knowledge economy, Kim Yeong-hwan, chairman of the Knowledge Economy Committee, Yun Jongyong, chairman of the Korea Electronics Association, Kim Ki-nam, director of the Samsung Electronics General Technology Development Center, Kwon Young-su, president of LG Display, Jean-Michel Stam, vice president of Broker Forum and, Richie Li, sales manager of Jiaweiyi took a VIP tour of the show. Many reporters and photographers crowded the venue for the opening ceremony of the KES 2011, signaling the start of the biggest IT and electronic product show in Korea.

The KES 2011 held the Smart Korea 2011 under the management of the Ministry of Knowledge Economy, the Korea Electronics Association and the National IT Industry Promotion Agency. The Smart Korea 2011 held conferences on the future industry and policies under the theme of "A Focus on the Smart Technology Revolution with Leading Countries in Asia."

In the Creative Futures Forum held on the first day, key note speeches were delivered by Yun Bu-geun, president of Samsung Electronics, Fujinuma Akihisa, chairman of the Nomura Research Center, the biggest consulting company in Japan.

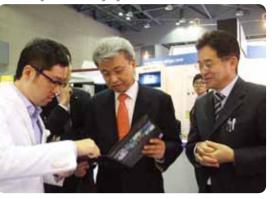
Kang Tae-jin, senior executive director of Samsung Electronics and John P. Roberts, vice



▼ Lee Kark-bum, Chairman of the President's Council on National ICT Strategies (middle) and Kang Hong-sik, Vice President of Korea Electronics Association (right) are checking out the latest gadgets









▲ Buyer Invitational Gala show





president of Gartner Research, delivered lectures under the theme of "The Future and Roles of Asian IT in the Smart Technology Era". Lee Kak-beom, chairman of the National Informatization Strategy Committee, Jeon Sang-heon, vice chairman of the Korea Electronics Association, Jeong Gyeong-won, chairman of the National IT Industry Promotion Agency and Choi Pyeong-rak, chairman of the Korea Electronics Technology Institute gathered to discuss on the future IT industry. In his key note speech with participants such as officials of the Ministry of Culture, Sports and Tourism, the Ministry of Public Security and Administration, the Ministry of National Security, the Korea Broadcasting and Telecommunication Commission held on the third and final day, a special IT advisor of President Lee Myung-bak, Oh Hae-seok said, "Smart Korea policies are aimed to make Korea a rich, warm and strong country".

In order to help form networks between participating companies and buyers, a gala show was held in the Amoris Hall on the fifth floor of Time Square in Yeongdeungpo with 500 participants, whom 250 were international buyers. The Gala Party was emceed by comedian Kim Yeong-cheol followed by various programs such as Taekwondo-based dance, a gala musical and a B-boy performance.

▼ The invited buyers are celebrating the successful opening of the 2011 KES



▼ Smart Korea 2011









▲ Visitor explored the Smart TV that features social networking services

SMART SAMSUNG

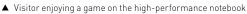
Two Leaders in the Smart Era

Samsung Electronics and LG Electronics unveiled advanced smart products for "Smart" and "3D" themes. Samsung Electronics caught people's eyes by setting up "Smart Monument" consisting of 48 by 46-inch displays and 16 by 55-inch smart TVs. In addition, Samsung indicated its vision to lead in the smart technology era by displaying various contents and smart life through a premium 75-inch LED screen 3D smart TV.













▲ Smart Monument and Galaxy SII HD LTE
▼ Samsung's home theater system that provides a 3D sound experience

Samsung Electronics also brought on "NX200," a hybrid digital camera, the Windows 7-based Slate PC series, an eco-friendly laser printer and other sleek smart products. In particular, Samsung introduced the world's first notebook with a built in solar battery board and the slate-type high-performance tablet PC that pertain the same functions as notebook computers have.

The new models Galaxy SII LTE and Galaxy SII HD LTE have the data speed five times faster than that of the other models. Moreover, its 860-liter two-door smart refrigerator has a "smart care" function that produces a smartphone code to enable a fast connection with an after-sales service center. The smart care solution is also applied not only to refrigerators but also to washing machines to enhance their washing performances and reduce power consumption.

▼ Samsung's smart home appliances introduced the revolutionary "Smart Care" system



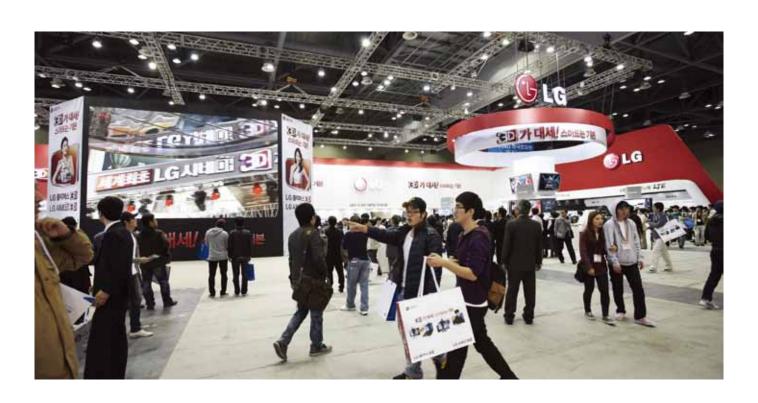
3D **LG**

LG installed a 370-inch super-sized 3D LED screen at the entrance of its booth and had 20,000 pairs of 3D glasses for visitors to experience the latest 3D technology. LG entertained visitors by enabling them to produce 3D contents and displaying them on its Cinema 3D TV and Projector and editing and saving them in LG Cinema 3D Notebook. Visitors were able to enjoy a complete 3D experience in its Total 3D Experience Zone. The company demonstrated a "dual play function" which enables users to see two different videos on one display in its 3D Game Zone. Visitors were also able to enjoy various 3D games such as "Street Fighter" through "KINECT". The Street Fighter game competition and a performance of break-dancers attracted many tech-savvy seekers. In addition, the company also unveiled Korea's first 3D notebook, "X Note A530," that can photograph 3D videos and an all-in-one PC with a built in 3D full HD monitor, "V300".





Visitors explore LG's ▲ 3D game system ▼





▲ Visitors enjoy a virtual game through "Kinnect" in LG's game zone





In the home electronics sector, LG presented high-efficient and eco-friendly smart electric home appliances. In partnering with one of the largest convenient stores in Korea, HomePlus, LG introduced its new refrigerator with the web ordering system that allows users to directly order from mobile devices.

Furthermore, visitors enjoyed observing innovative smart home appliances such as a refrigerator which informs people of expiration dates and how to cook foods, a washing machine controlled by a remote device, a microwave oven that shows cooking information and a robot cleaner wirelessly monitored.



 ${\bf A}$ A child smiles after seeing herself on the " I want to be", a Aniframe's application for iPad

Software & Mobile

Key Word in IT Industry, Software

"The smartphone revolution" is having a huge impact on the software industry.

The kernel of the worldwide smart revolution is software. The value of the world software industry has already surpassed USD 1 trillion. The Korean software industry is dreaming of a second take-off. Various leading Korean software companies took part in the KES 2011.



SK C&C Nexcore Series A

▼ Visitors watch CADIAN software that fixes pronunciation



▼ Visitors hear about fast-food





lacktriangle Job fair was held at 2011 KES for potential applicants

SK C&C exhibited its product that won the Korea Software Competition prize, the Nexcore series, which elevates companies' productivity in development. Another notable product was Inteli Korea's CADian that is currently being exported in 120 countries. And the Speech Mirror is a language treatment simulator that helps people pronounce sounds more accurately by seeing the image of the human speech organ.

Other popular softwares included "Fast Boot" which makes operating systems faster, "Polaris Office", a mobile office solution, "Ployd", a black box application for smartphones and "Sherpa", a mountain-climbing navigation application. In the Software and Mobile Hall, the KES 2011 held the Job Fair to give software companies opportunities to recruit new talented employees.

400 online applicants took part in the job fair and 250 applicants also applied for the job fair interviews at the booth. A total of 52 companies including Core Logic had 560 job interviews with applicants.



■ Intel Korea's notable product, the CADIAN software





▼ Visitor uses a feather to play around with Next Window's touch-screen



Digital Broadcasting Equipment: 3D Broadcasting Video

Now 3D videos are taking over the broadcasting world. People are used to media that can offer 3D contents. Now consumers can enjoy more advanced 3D life with LG Cinema 3D TV, ranked as the best 3D experience. Visitors of the Digital Broadcasting Equipment Hall and the 3D Expo Hall were able to check the leaders of the 3D industry – Redrover, TV Logic, Visual Research and 4DVision.

Digital Broadcasting

TV Logic is a producer of HD monitors for broadcasting. Its products have excellent view angles and express colors naturally. Its products account for 80% of monitors of major Korean TV broadcasting stations such as KBS, MBC, SBS and EBS. According to Future Sauce, a data research organization in the U.K., TV Logic's market share ranked third in European market and fourth in the North American market.

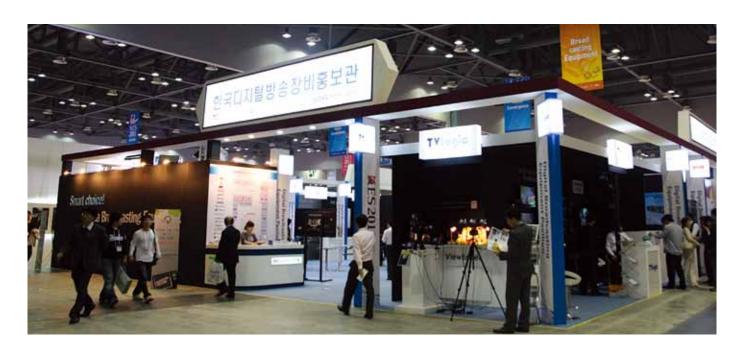
Visual Research presented the "Tornado 3D", a real-time broadcasting graphic solution that can be used in various sectors such as news, sports and weather forecast. The solution produces subtitles and diagrams for TV programs. As the product provides 3D effects, users can create 3D subtitles and diagrams for TV programs.

Hoseo Telecom displayed its various equipment used for broadcasting signals in buildings and apartments. Its main products were the MPEC encoder series, digital modulators and converters. Among them, the MPEC encoders are equipment that receives digital signals and send them without degradation within 0.15 second. In addition, the product supports full HD 1080p which is double the resolution of those of other companies.





▲ TV Logic displays its latest products
▼ Overseas buyers explore Korea Digital Broadcasting Equipment Exposition





▲ Redrover's latest 3D camera technology, the "Rig" system

3D EXPO





Redrover, a 3D-specialized company, displayed five types of a camera rig system, which is the core equipment for 3D photography. Produced jointly with Jeju Halla Univeristy, the 3D rig system attracted many visitors. It also displayed its low-cost rig (retail price: 17 million won) for independent filmmakers. Moreover, "True3DPT Ver.1.5", a 3D presentation software, amazed people by turning Powerpoint files into 3D materials.

4DVision is a 3D content and software developer. The company brought on Korea's glassless 3D display with the support from the government in the KES 2011. Users of its product do not need 3D glasses. The company acquired an overseas certificate for this product. With its ability to expand the 40-inch screen and a multi-vision function both available in LCD and LED screens, 4DVision is in the middle of jointly developing a big 3D electric bulletin to be installed on rooftops with a Japanese LED manufacturer, Habino. They will launch a prototype in December.

Micro Display also launched a glassless 3D panel. The 20-inch product used in LG 3D Cinema TV has been commercialized and the 25-inch product is scheduled to be commercialized by the end of 2012. Because of its technology, people can enjoy 3D videos on TV naturally. One other strength of Micro Display's glassless 3D panel is that it is optimally designed for TFTs.

- ▲ 3D medical equipment system
- ◀ 3D glasses look like ordinary Sunglasses

IT Convergence Hall, "Mixing Leads to a Valuable Creation"

Industrial Mix & Match Resulting in Development of Diverse Products

"Mixing Leads to a Valuable Creation" was the motto of companies located in IT Convergence Hall. Mix & Match or creative ideas are something that are quoted very often on any occasion but cannot be achieved easily in reality. You can meet the companies that have successfully achieved "Mix & Match" at the Korea Electrics Show. The thirty companies including VINYL I, OBIGO, and MDS Technology are the ones which have generated newly added value by applying different technologies to one product.

Visitor moves miniature train using his Eyemax's brainwave controller. ▼

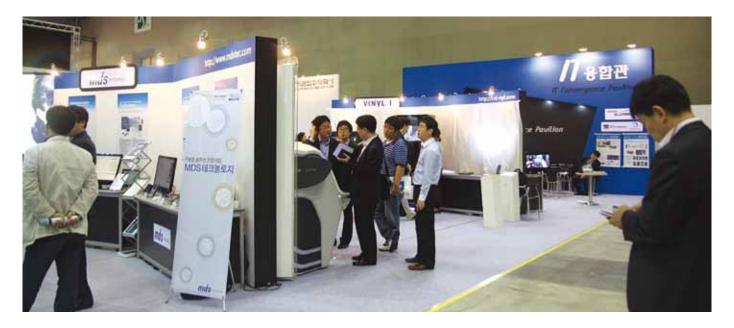
VINYL I released "Translook", a transparent display showcase with interactive interface, developed for the first time in the world. Translook provides higher penetration ratios and color realization, enabling glass-like, transparent, and clear display. Users can manipulate product information and images interactively on the frontal glass while the touch sensor controls the direction of a turntable installed inside the showcase so that the users can observe the actual products in 360° angle.















Hurob's outdoor headsets OBIGO's CEO describes its web browser for vehicles to buyers



▲The glamorous mosaic cross LED wall installed on Hungseo Industry's booth

Yujin Robot launched the "iCLEbo Smart", a smart cleaning robot that correctly recognizes locations and calculates cleaning routes with a built in navigation camera.

OBIGO presented a web browser for vehicles through which users can surf the web, which was only available via the wireless Internet previously. This is a highly advanced 'network optimization' technology developed for browsers to work well even when the wireless network environment is slow.

MDS Technology introduced "TestExpress", an APP test automation solution.

Software quality is efficiently checked based on automated testing process. The costs are innovatively reduced as the manual checking system is auto-

Hungseo Industry decorated its booth with a cross LED wall made up of various kinds of LED products.

Additionally, Hurob released outdoor headsets for purposes such as biking and leisure sports. This product is attached to a helmet and compatible with Bluetooth tools and smartphones.

▼ MDS Technology's booth



Green IT, "IT Breathes, Too"

The increase in energy use and carbon dioxide emissions leads to many problems such as global warming, anomaly climate, environmental pollution, natural disasters and food crises, necessitating our social responsibilities to protect the earth as current occupants of the planet. To promote such awareness, Green IT Hall at the Korea Electronics Show emphasized the issue of low-carbon green growth as a matter of survival, not just an option and introduced more various green products than ever before.

The Electronics and Telecommunications Research Institute presented the virtualization system-based Green PC2. Four users will use one PC2 to apply a different task to each monitor as four graphic cards installed in the main body are connected through a single monitor. This product applied Linux-based virtualization system to reduce power consumption and promote sustainability. As four PCs are maintained via one main body, the operational costs can be decreased.

LG Printer Machjet is a printing solution where you can print out one piece of paper every minute. The PSA (Page Straight Array) print head of the Machjet sprays 900 million ink drops per second from 74,000 nozzles as the print head is fixed in the direction that is identical to the paper width. Machjet printer cuts printing costs, costing 55 Won per paper and reduces power consumption and carbon emission up to 1/17 per minute.

Samsung Electronics presented Green IT panel developed with an aim to promote green growth. This product will use light sources such as solar light or nearby lighting sources without any external power. It applies 46-inch, 22-inch and 13.3-inch transparent displays and new backlighting technology. The company additionally showed low power-consumption display to reduce power consumption by a maximum of 50%.

Samsung Electro-mechanics provided a newly launched motor. Developed as part of new growth dynamics promoted since 2009, the motor is a core component that replaces the existing gasoline-type internal combustion engines. Among others, charging modules for vehicles can result in efficiency increased up to 93%. The development of this product enables high-speed charging of electric cars, contributing to the groundbreaking development of hybrid cars.



ETRI showcases the virtualization system-based Green PC2



LG Printer, the Machjet ▶



Samsung Electro-mechanics's newly launched motor



Power Plaza's electric vehicle, the Yeppzana 3



www.kes.org New & Smart 21





- ▲ Innoworks's new smartphone cases ▼ Chois Technology's X-pointer
- All New Products Aimed at the Smart Age

The Korea Electronics Grand Fair presented a variety of smart devices and accessories for contemporary people to promote smart life, such as Bluetooth helmets for leisure, RF wireless presenters, desktop cases, mobile cases, Voice-Echo Earphones, power meters and electronic wave breakers.

Chois Technology presented the country's best wireless presenter, "X-pointer. The X-pointer series provide various functions including Plug & Play, effective distance amounting to 30m, laser pointers, page up & down, and black screens. The X-Pointer is specifically designed for a convenient use.

Dawon DNS showed a home power meter titled "Power Manager". Power Manager is a household power meter that informs users of the amount of power used for electronic goods on a real-time basis and blocks power outage by automatically recognizing unnecessarily wasted standby power.

Yuhan Hitech is an expert that has developed ITX cases that fit Intel's ITX boards for the last three years. Yuhan's ATX PC case is a new product for smart users that enables smart home materialization via wireless and wired routers. HTPC cases are very popular in the European Market where home theater functions are frequently used.

Innoworks developed a 0.7T thick, slim case that replaces connecting hooks with flexible and elastic materials, escaping from the existing case connection through hooks. The company's Galaxy S2 case can change the bumper colors without any restriction. The materials include rubber and gloss covers. DUES case combines the advantages of rubber and glass.

Cheong Tech developed and launched Voice-Echo Earphones. This is the first mobile singalong earphone where users can sing and monitor while listening to music. They are good for educational purposes as users can practice pronouncing.

Noise Tech, an expert in specializing in blocking electromagnetic waves, presented various systems covering from electric device testers for vehicles to static electricity testers.







Noise Tech's blocking electromagnetic waves system 🔺

Triple Junction's brand Certification system

Dawon DNS's power manager Cheong Tech's Voice-Echo Earphone ▼





Taiyo Yuden was always crowded with so many visitors during the exhibition

Bourns booth

Yelim GMS launches many new products including special glasses ▼

BOURNS' BOURNS' BOURNS'

Birth of Smart Technology attributes to Electronic Components and Parts

Korea Electronics Show highlighted various digital media products leading the global market. The birth of these products are attributed to global electronic components, parts and modules. Let's explore these components, parts and modules that have enabled the substantial smart boom.

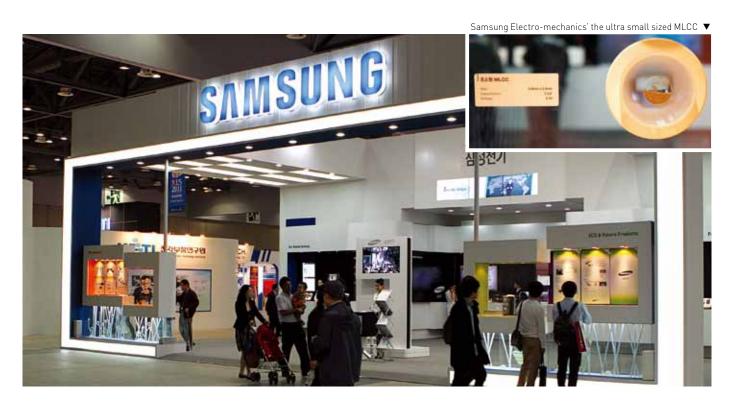
The most eye-catching product among all others is the ultra small 0603 sized Multilayer Ceramic Condenser (MLCC) at a superb high volume of 2.2uF. Developed by Samsung Electro-mechanics, the country's best component and part provider, MLCC is world's first developed component applied to smart phones and LCD TVs. As a highly value-added product, a full 380cc wine glass of the MLCC will cost KRW 300 million. Also, the company's 93% efficient electricity charging module for electric vehicles is attributed to this component, MLCC.

The Japanese electronic company, Taiyo Yuden, also exhibited many elec-



tronic components, parts and modules at the exposition, such as the world's first 1206-sized 220uF MLCC. Another global electronic company, **Bourns**, exhibited components, parts and modules by communication, industry and consumer product. The most prominent product is the device that controls power and voltage. The device applies the core technology of electronic goods that could be miniaturized even more.

Domestic SMEs also launched many new products at the Show. Yelim GMS, expertise in importing special glass and glass-processing machines, introduced glass conductive coating to the UK's Pilkington Group.



www.kes.org Education 23



▲ Yujin Robot's iRobi Q attracts many Kids



▲ The DiKi-3000 introduced by KEA



▲ Dongyang Future University's students showcase their robots



▲ Clusoft's Speech Mirror



Smart Robot the Best Study-buddy "Smart Time for Education, too."

There is a new smart trend in education, too. Last year, the Ministry of Education, Science and Technology invested KRW 10 billion to foster a learning environment for robotics kinder gardeners. In 2012, the Ministry will invest up to KRW 2 billion in a contest for ideas in robotics for educational purposes. Consequently, the R-learning (Robot-learning) market will be as large as KRW 650 billion Won by 2018. Some of the new smart educational products were "iRobi Q", a robot for infant education developed by Yujin Robot, "Diki-3000", a digital basic learning kit provided by the Korea Electronics Association, and Speech Mirror, a language therapy and learning software developed by Clusoft. These new products increased visitors' interest in the R-learning market even more.

Yujin Robot first commercialized robots for educational purposes in 2002 and sold more than 1,000 iRobi Qs to pre-elementary education facilities across the country, supplying 15% of public and national kindergartens. iRobi Q is an intelligent service robot that provides fun and convenient features to users, specially designed for children learning. It features various content services, such as free navigation movement, accessible communication with the robot and touch detection. Also, human-robot interaction technologies are also available in both Korean and English, up to an efficient rate of 90%.

Following the previous year, the **Korea Electronics Association** presented Diki-3000, a digital basic learning kit. Developed for students to solve puzzles by arranging blocks of electronic parts and components that look similar to Lego blocks. Terminals are present within blocks to fix lines and electronic components. When two or three-terminal blocks are connected, complex circuits for MP3 player connection can be generated. Throughout the exhibition, Diki-3000 attracted many visitors.

Clusoft introduced Speech Mirror, a three-dimensional verbal organ simulator that helps with language therapy and learning. Its screen shows the sectional figure of the whole mouth, including the tongue to help with accurate pronunciation. Park, Bong-Lae, CEO of Clusoft said, "It greatly attracts language therapists as a groundbreaking program to help people with speech disorders, multicultural families and foreigners learn Korean".

"Korea's Display Spreads Throughout the World" [iMiD]

"The International Meeting on Information Display Exhibition (iMiD) 2011" hosted by the Korea Display Industry Association invited 97 companies from about 10 countries including China, Japan, Taiwan, USA and Germany as well as Korea. During the exhibition, many events such as the International Display Research Conference, the Overseas Buyer Trade Meeting and the Display Job Fair took place. The Overseas Buyer Trade Meeting invited about 30 people to engage in purchases from Chinese and Taiwanese panel providers and provided one-to-one trade meetings with domestic display companies. The International Display Research Conference saw an increase of 7% in terms of the presentation of overseas papers from the previous year, solidifying its ground as one of the world's three largest international display symposiums. This year, a total of 112 papers and speakers were invited from 17 countries and key-note speeches by Ahn Seung-kwon, CTO of LG Electronics were available in addition to 14 tutorial and workshop presentations.

Samsung Electronics released its ultimate power-saving Green IT Panel and Full HD-level 3D Active Glass. The full HD-level 3D active glass can be easily recognized as something attached to the front of a TV screen based on paneling of the 3D glasses shuttering function, enabling the full HD support. Although its wider 3D viewing angles will enable users to watch TV while moving or lying down, 3D image viewing will not reduce resolution. Because of the rightOleft shutting method, the existing spatial division resulted in flickering or lines on the screen. However, this product applies the time-sharing method so that the images on the right and left are alternately displayed 120 times per second at 240 Hz.

LG Display attracted visitors with its most advanced products such as high-resolution wide-angle (AH-IPS) display and FRP 3D display that work without flickering. AH-IPS display overcame the 250ppi limit in the Amoled method and achieved real HD function. The SRGB support materializes almost every natural color. FPR 3D display uses circularly polarized filters so that the users can enjoy clear screen quality while moving around. It is a certified flicker-free product and praised for its genuine 3D materialization.

Merck Advanced Technologies presented organic electronic materials used in OLED and Flexible display, highlighting the next-generation display as well as Reactive Mesogens used in the company's current core businesses such as LCD and 3D Patterned Retarders.

Juergen Koenig, its CEO said, "The IMID is an important event to Merck that reveals the development status of liquid crystal and new display materials. It was a good opportunity for the customers and audiences to learn about the recent technological trends in the display industry and the flow of new displays."









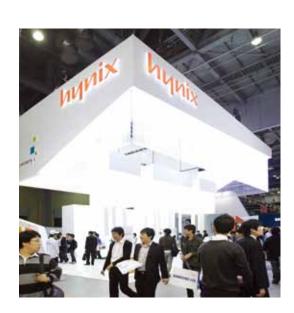


Green Management, **Green Semiconductors [iSEDEX]**

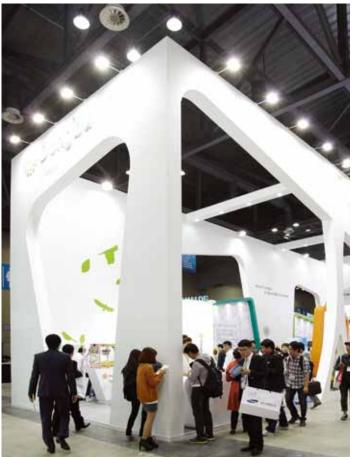
"The 13th International Semiconductor Exhibition (i-SEDEX)", the country's largest semiconductor exhibition, was held at Kintex. Hosted by the Ministry of Knowledge and Economy and supervised by the Korea Semiconductor Industry Association, it is an arena of technological competition where the most advanced products in the areas of design, equipment, and materials are introduced. This year, large domestic companies such as Dongbu Hitek, Samsung Electronics, and Hynix as well as global companies including Amkor Technology Korea took part in the event to present their solutions and semiconductors aimed at promoting green management.

The event, established in 1999, celebrated its 13th anniversary this year. As Korea's largest exhibition in the field of semiconductors, visitors were able to identify Korea's memory semiconductors as the world's best technology as well as system semiconductor items as the largest market share in the semiconductor industry. Technological seminars included education of safety standards for semiconductor equipments, the Analog Semiconductor Leaders' Forum, an autumnal symposium conducted by the Korean Society of Semiconductor & Display Technology, convergence seminars, the Technology Transfer Fair and ISMP as well as trade meetings and job fairs.

"The Analog Semiconductor Leaders' Forum" provided an opportunity to identify the present and future of the rapidly changing analog semiconductor industry. Market trend seminars were also held to help the participants to understand the market trends by each field area, covering power semiconductors, analog semiconductors, and system semiconductors. Dongbu Hitek introduced the world's first 0.18 micro BCDMOS (Bipolar Cmos Dmos) technology that applies analog-specialized processes. Samsung Electronics also promoted the worlds first 20-nano DDR3 D Ram whose mass production began in September 2011. Lastly, Amkor Technology Korea introduced the world's first Cu Pillar FPFC (Fine Pitch Flip Chip) that materializes super-fine pitch of 50 micro or below. Hynix released 8Gb mobile LPDDR2 D Ram and Five-million pixel CMOS image sensor (CIS).



▼ Donabu Hitek's booth



Silicon Mitus's booth Amkor Technology Korea's booth





Many Global Distributors Make their Visits

Many global distributors such as Broker Forum, famous as a global B2B trade hub, HongKong Inventory, China's HQEW, Japan's Chip1Stop, Singapore's Future Electronics, Korea's Parts Finder, etc. attended the KES exhibition, achieving various business deals.

Broker Forum

The Window of Online Trade, the Broker Forum Visits Korea



The **Broker Forum (www.brokerforum.com)**, with headquarters of about 3,000 member companies in 60 countries, visited the Korea Electronics Show. The member countries distribute various electronic parts and components, integrated chips for manual parts and components, semiconductors and transistors internationally. Other visiting companies included Jiaweiyi, TY International Trade Limited, and Chip9. They had time to solidify network over their three-day visits via hundreds of meetings.

Rich Li, Sales Manager of Jiaweiyi said, "Jiaweiyi has distributed electronic parts and components internationally for seven years. Its core items include semiconductors as well as automatic and manual parts and components. We had about 120 meetings and met many buyers with which we could enter into substantial contracts."

Jean-Michel Stam, Vice-President of Operations from the Broker Forum said, "We

provide global trade marketplaces for buyers and vendors of electronic parts and components. Our database connects manufacturers with vendors by using 60 million entries."

Stam finished the interview by saying, "We hope to find new business networks through the Korea Electronics Show. Our goal is to help member companies to establish sound prices, adjust demand and supply, and facilitate business."

Hong Kong Inventory

A solid helper for entry into Chinese Market. ---

HongKong Inventory (www.hkinventory.com) has been visiting the Korea Electronics Show since 2005. It is the B2B trading hub that delivers electronic parts and components online to the whole world. Vincent Lui, the CEO of HongKong Inventory said, "We visited the exposition to strengthen our cooperation with the Republic of Korea. We employ Korean people to provide better services and reduce language barriers. Our website is serviced in Korean, too. We had many meetings with member companies from various countries and obtained various types of information for Chinese member companies. We have made about 400 new business partners from this show."

Lui continued by saying, "The best way to save time and cost for companies planning to enter the Chinese market is to get help from HongKong Inventory. It helps the member companies to meet suppliers all over the world, reviews each national customs requirement as well as import procedures in China before loading, and reduces risks of member companies."





Future Electronics

Introduces Specialized Services by Overcoming Geographical and Regional Limits

Future Electronics is a global distributor of electronic parts and components. Established in 1968, it has rapidly developed to become the best distributor in the industry. As the company has maintained close business partnership with suppliers and customers and provided expertise in all stages of design-production cycles, Future Electronics is considered to be the most innovative company in the world.

The company has branches worldwide, all specialized in each region such as Europe, the Middle East, Africa (EMEA), USA and Asia. Each branch has field application engineers equipped with technological sales capacity to support new designs for each region by overcoming regional limits on each design and manufacturing sites.

Anthony Alberga, the Vice President, was confident that its participation in the KES should widen the company's status in the Korean market.

HuaQiang Bei

China's Largest Distributor Specializing in Electronics

Another notable electronics distributor is **HuaQiang Bei (HQEW)**, located in Shenzhen, China. It is an online and offline distributor equipped with an electronics distribution site that is 10 times larger than Korea's Yongsan Commercial Electronics Complex. Established in 2002, HuaQiang Bei has actively supplied electronic parts and components, IC and computer parts and components to buyers from all over the world. At KES, it introduced a new distribution system to representatives from the three most prominent Northeast Asian distributors such as Korea's Parts Finder and Japan's Chip1Stop.

HQEW attended the 2011 KES to learn trends in Korea's electronics industry and various electronic goods available that will contribute to establishing new business opportunities.



Parts Finder

- Korea's Indigenous B2B Marketplace for Electronic Parts and Components

Korea Parts (www.parts-finder.co.kr, CEO: Kim, Yoon-shik) established Parts Finder as an indigenous B2B marketplace for electronic parts and components in November. It provides electronic commerce of electronic parts and components based on the cooperation of three countries, Korea, China, and Japan.

Parts Finder is an electronic commerce website established jointly by the Korea Electronics Association (KEA), the host of the Korea Electronics Show, Korea Parts, specializing in distribution of electronic parts and components, and EC Plaza, a trade portal. It established the world's largest electronic commerce network that covers all processes from manufacturing to distribution, in order to provide total services of purchase and exports of electronic parts and components.

work that covers all processes from manufacturing to distribution, in order to provide total services of purchase and exports of electronic parts and components as well as overseas marketing. Additionally, it provides the "Parts Finder Service", an application where you can search parts and components through the internet or smartphone, based on the connection of parts and components databases covering 2.5 million from Korea, 100 million from China and 8.5 million from Japan. Oh Sang-heon, the Director said, "Parts Finder was established to solve the deeply embedded problems with Korea's electronic parts and components trade sites that have fake inventory information. Its purposes also include the support for member companies to confirm the inventory of major companies in Japan and USA before purchasing. Currently, you can search 10 million electronic parts and components. We will expand our services so that you can check the inventory in Europe, too."

Asia's Largest Business Exposition

Buyers invited from the global markets such as USA, China, India, Russia, the Philippines, and Indonesia took part in the Korea Electronics Show to celebrate the event. Especially, top 100 companies in China, 11 Russian companies including Delta Group, seven American companies including Pacific Group as well as buyers invited from India, Philippines, Japan, and Australia provided consultations on exporting, resulting in a net worth of USD 1.7 billion exports.

Russia Market Craves for New Products ------





Mikhail Petrov, Technical Director from Delta Group visited the Korea Electronics Show to find electronic goods to surprise the Russian market. Delta Group is Russia's largest electronics distributor, which has introduced the most advanced audios, home appliances and electronic machines to the country. Petrov said, "Recently, our greatest interest lies in those products that reduce electricity consumption such as green home appliances. We are keenly observing Korea's eco-friendly home appliances". The company wants to increase its high-tech product groups by increasing budgets. Korean products are becoming more popular with better quality and more reasonable prices than Chinese products. Delta Group is also interested in products under development. Currently, the company's sales revenue is USD 30 million per month. Their participation at KES can be a potential

route for Korean companies to directly export to Russia. The director said, "If Korean companies maximize their development and manufacturing technologies while maintaining the quality and price levels, they will succeed in our market."

Almazov Pavel, Director of Service Department, advised Korean companies that wanted to succeed in the Russian Market. He said, "I hope that large companies such as Samsung or LG can take part in Russia's trade shows. Russia has great potentials and they need people specializing in the Russian market."

Bondaernko Maxim, Product Management Manager and Suskin Andrey, Marketing Manager from Technopart as a CD and DVD distributor in Russia, are looking for suppliers of storage media. They said, "We are looking for importing popular products in to the Russian market such as tablet pens and touch screens. Korea is a power of online game and produces the world's great keyboards and mouses and we are keen on the country's development in these areas."

Alexy Savonekov, another buyer from Russia, craves for direct meetings with relevant companies. He said, "I came here to find solutions that might provide effective power management to customers."

Indonesia

Witnesses newly emerging Korean Electronic Home Appliances

Henky Tjokroadhiguno, Director of Megatronix, a veteran Indonesian IT distributor which has supplied IT products since 1991 said, "We are looking for Korean partners to set up businesses at the Korea Electronics Show. We are negotiating with some of them to introduce new electronic home appliances to Indonesia. Korean products are well recognized in Indonesia and I am particularly glad to be exposed to many more products at this show. I expect that the introduction of Korean electronic home appliances to the Indonesian market will provide a wider option to our customers."



Director of Service
Department at Delta Group
Almazov Pavel



Jean-Michel Stam -The Broker Forum, Canada

Wants to Introduce Korean Electronic Parts and Components Worldwide

Jean-Michel Stam, Vice President of the Broker Forum from Canada said, "We use our 60 million databases to connect parts and components manufacturers and sellers. We have networks that can provide parts and components whenever necessary and hope to see various chances to use our resources at the Korea Electronics Show."

www.kes.org Sales Fair 29





Mongolia

Finds the Best Broadcasting Equipments at the Korea Electronics Show

Sansar Cable, the leading cable TV service provider in Mongolia operates 15 channels and 40 international broadcasting stations. Daminsuren, Senior Engineer said, "At the Korea Electronics Show, we found the best transmitters and cabling solutions. Also, we were exposed to many innovative products necessary for our business. We are already in discussion with two Korean companies for further cooperation."



Sansar Cable, Mongolia

Nigeria -----

Will Nigeria Witness Korean Products Leading the African Market?





Peter Odimegwu, CEO of Kamdi Computers and Ethel Odimegwu, CEO of Ethel Ventures, took part in the Korea Electronic Show as representatives of Nigerian IT companies. Both companies are looking for Korean partners to supply the best products to the rapidly rising African IT market. They said, "We could excavate really good networking opportunities at the show and noticed many products that deserve our supply services. We would like to visit the Show in 2012 again."

USA

Korea Leads the Next-Generation 3D Technology for US

Gary Carter, CEO of Melrose Mac, a provider of Apple-based 3D products to filmmaking companies producing large-scale movies such as the Spider Man, visited the Korea Electronics Show to find new 3D production technologies suitable for the US market. Carter said, "Currently, the demand for 3D production is increasing rapidly while there is no prominent production in the 3D area. I really want to know how Korean companies view this." He passionately explained about various images that could be produced via camera application and added, "Those products made by Samsung, LG, and Redrover impressed me greatly."



The Power Supply Monitoring System Found

Purchase Manager Ray Blankenship from Mauel Corporation visited the Korea Electronics Show to find a power supply monitoring system. While it is a special solution that cannot be easily found at other exhibitions, the purchase manager of Manual provided a very positive response on his visit to Software Division at the Show. He said, "Each time a power supply device stops working, several million dollars are wasted. I was looking for a solution with 3D products that could cope with such a power supply problem and found out the potential products at KES."

MEDIA COVERAGE





▲ YTN



▲ Economy Today

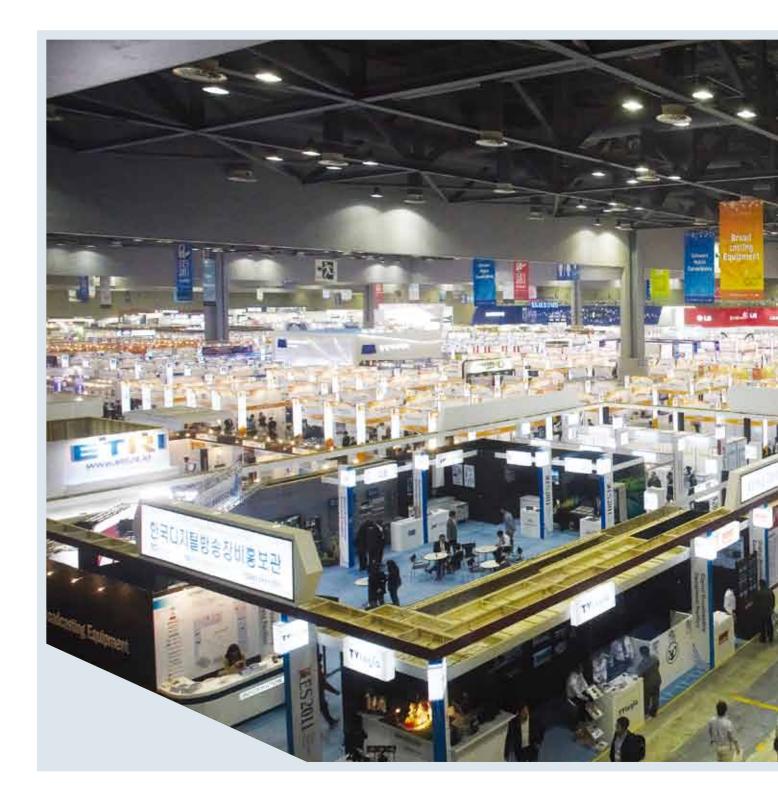
- Newspaper

EBN, Korea IT Times, K-mobile, SBS CNBC, YTN, YTN TV, ZDNet Korea, Construction Economy Newspaper, Kyeongin News, Economy Today, Khan, Korea KR, Tomorrow News, Nocut News, News Way, News Tomato, Newsis, Data Net, Donga.com, Digital Times, Mail Economy, Money Today, Beta News, Busan News, Break News, Seoul Economy, Seoul News, Sports Seoul, Sports Chosun, City News, SBN News, Asia Economy, Asia Today, Eye News 24, Yunhap News, e-News Today, E Daily, Chosun Biz, Korea Times, Korea Herald, and more.



Web Media & Blog





KOREA ELECTRONICS GRAND FAIR 2011

Statistical Results

- Statistical Results

• **Dimension**: 53,541m²

(From 1 to 5 halls in first exhibition center at KINTEX)

• Participants: 773 companies, 2,343 booths

• Visitors: 52,788 (including 2,153 foreign buyers)

• Sales Fair Results : 1.7 USD in total

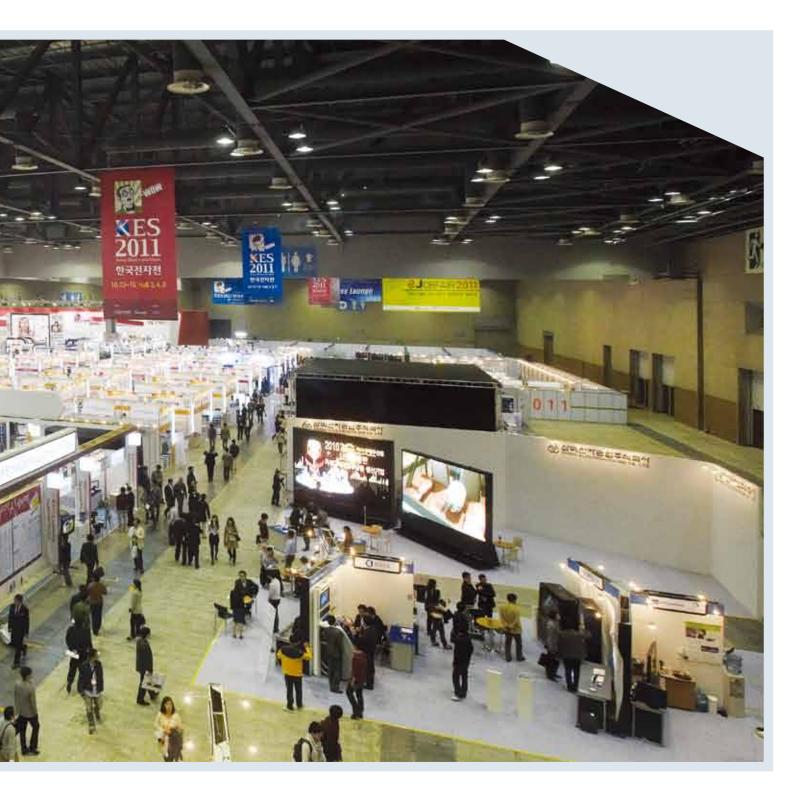
- Events

• Sales Fair: India, Russia, Chinese Distributors,

Global Buyer Invitation Sales Fair and more

• Conference : 50 cases including Smart Korea 2011

• Events : Job Fair



















KOREA ELECTRONICS GRAND FAIR 2012

Summary

-Title : Korea Electronics Show 2012

-Theme : Korea Electronics Shows What IT Will Be!
-Date : Tue. Oct. 9 - Fri. Oct. 12, 2012 (10:00~17:00)

-Location : From 1 to 5 halls in first exhibition center at KINTEX

(Ilsan, Goyang-si, Korea)

- Dimension : 53,541m²

-Participants : 800 companies, 2,500 booths

-**Visitors** : approx. 60,000

- Hosted by : mke 지식경제부 세계속의 경기도

- Organized by KEA

-Sponsored by : NIPA, ETRI, KETI, FKII, KOSEA, PAK

- Global Organizations in cooperation :

CEAC, CCPIT, CECC, HQEW (China), TEEMA (Tipei), JESA, Chip1Stop (Japan), HKTDC (Hong Kong), AEECC (asia electronics exhibition cooperation committee), IFA (Germany), CES (USA), RATEK (Russia), CMAI, TEMA (India), VEIA (Vietnam)

Exhibited Products

ICT

Telecommunication, Mobiles, Navigation, IP, Net Solutions, Antennas, Cable, Computing, PDA, Notebook PC, Server, Solution, S/W, Storage

Imaging and Solutions

Beam-projector, Imaging Machine, Photo, Digital Camera, Printer, Camcorder, Memory solutions

Multimedia and Home Entertainment

TV, DVD, Home Cinema, 3D TV, IPTV, Monitor, HiFi, Loudspeakers, Games, MP3, Hands-free

Home Appliances

Refrigerator, Air-conditioner, Vacuum cleaner, Washing machine, Dish washer, Coffee machine, Electric toaster, Beauty care appliance, Kitchen appliance

Car Electronics and Securities

Black box, Car electronics, CCTV, Networks, Bio or Sign capture, Cyber security

Convergence and Other applications

Broadcasting equipment and systems, Green IT, Digital lego, e-health, Product Design

Modules, Parts and Materials

LCD, OLED, LED, Solar, PCB, MLC, Capacitor, Resistor, PoC, Sensor, Switch

Software

Mobile S/W, Embedded System, D/W & CRM, Cloud Computing, Data Storage, Information Security, Package S/W, System Integration







www.kes.org



Online Registration at:

www.kes.org

How to Apply

How to Apply

Submit an application online at www.kes.org by 29 Jun, 2012.

Rental Fees

Booth Type		9m² (1booth)
Block Booth (Space Only)		US\$ 2,600
Standard Booth (Shell Scheme)	Basic	US\$ 3,200
	Premium	US\$ 3,900

Space Only

Space Only- KES only provides booth space. Participants are responsible for installing all facilities at their booth.

Shell Scheme

KES provides the basic facilities of a booth, which includes basic electricity, a desk, a signboard, and a light.

Premium

KES provides the Shell Scheme including a woodworking facility, table and chairs





Payment Information

Rental Fee Discounts

- 10% Discount till 30 March, 2012
- 5% Discount till 31 may, 2012

Rental Fee Discounts for VIP

- An additional 5% discount is being provided for participants who have been participating in KES for 3 consecutive years.

Payment Information

Deadline for Payment : Jun 29, 2012

Bank Name : Kookmin Bank

Account Number : 598601-04-001578

Swift Code: CZNBKRSEXXX

Beneficiary: Korea Electronics Association (KEA)

Contact Information

KEA Market & Exhibition Center

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