Cutting-Edge IT & Electronics Comprehensive Exhibition

APAN

Combined Exhibition of Advanced Technologies

Exhibition Report

NEXT — Today's Dreams, Future Realities

CEATEC JAPAN 2015

R

Oct. 7 Wed. ► **Oct. 10** Sat.

Makuhari Messe

ESA

Sponsors: CEATEC JAPAN Executive Board

JEITA Japan Electronics and Information Technology Industries Association

CIAJ Communications and Information network Association of Japan

Computer Software Association of Japan

CEATEC JAPAN 2015 TOPICS

Number of daily visitors increased day by day!

• Visitors

Total number of visitors*: **133,048**

*Total registered visitors, registered press and exhibitors, excluding reentries

A unique and comprehensive show of cuttingedge IT and electronics technologies, electronic components, and devices all under one roof

Along with IT and electronics technologies and cutting edge component and device technologies that help to paint pictures of future lifestyles, the event showcased usage and application of these technologies in "easy-to-understand" creative manner.

• Exhibitors

Total number of exhibitors: 531

Various programs that support technologies and innovations

Special exhibits, Venture & University Area exhibits, and sessions at the Open Stage gathered visitor interests. Also CEATEC conferences held at the International Conference Room counted more than 110, many of which filled with the maximum capacity.

Conference

CEATEC conference attendees*: **18,053**

*The total number of attendances to sessions held at the International Conference Room.

NEXT Innovation Area Open Stage

Open Stage conference attendees: **3,896**

In the focus of the global media

In addition to imaging technologies and ICT, and wide ranging sensor technologies, the Japanese and international media gave their attention to new directions in robotics, wearable devices, and new proposals to next-generation energies. In the international media, BBC World broadcasted live, and many media organizations from around the world proactively and widely covered the show including France 2 broadcasts.

Press Visitors

Total number of press/media visitors: **1,542**





CEATEC JAPAN 2015 TOPICS

Increase in participation of overseas exhibitors and visitors!

Engineers and executives in the IT/electronics filed came to CEATEC JAPAN from all four corners of the world including China, Taiwan, Korea, Hong Kong, the United States, European regions and more.

Overseas Exhibitors

Number of overseas exhibitors: **151** from 19 countries/regions

Overseas Visitors

Number of overseas visitors: **2,075** from 47 countries/regions

Executives and key persons from around the world under one roof

Many executives and key persons from around the world came including top users, leaders of exhibiting corporations and associations and those involved in government and science. These key people inspected booths, participated in conferences in panel discussions, experienced the latest cutting edge technologies, and then engaged in hot discussions about the creation of new industries through broader fusion of IT/electronics and other fields.

CEATEC JAPAN 2015 was held at Makuhari Messe in Chibacity over 4 days from October 7 (Wednesday), to October 10 (Saturday) with support from 25 government ministries, agencies and associations including the Ministry of Economy, Trade and Industry, the Ministry of Internal Affairs and Communications, Japan Broadcasting Corporation (NHK) as well as cooperation from 50 other associations.

Counting the 16th year, the show brought together key industry persons and engineers charged with the technical innovation of the future in the Lifestyle & Society Stage, Key Technology Stage, in the specially planned NEXT Innovation Area and CEATEC Conferences, under this year's theme of "*NEXT—Today's Dreams, Future Realities*", the show provided opportunities for exchange on wide ranging business developments as well as opportunities to visualize seamless development trends in IT and electronics for a variety of industries and applications.

For the business and lifestyle settings of the future realized by the world-class technologies, this year we saw a number of exhibitions and presentations that showed broadness and improvement in IT and electronics centering on technologies and artificial intelligence linking to CPS/IoT. The event turned out to show anticipations and value for the future in IT and electronics that are applied for a variety of fields including automotive, robotics, wearables, drones, and space technologies.

CEATEC JAPAN 2015 Topics



CEATEC JAPAN 2015 Opens!

The Cutting-Edge IT & Electronics Comprehensive Exhibition CEATEC JAPAN 2015 opened on Wednesday, October 7, 2015. Opening Reception was held at the Tsuruno-ma Room in Hotel New Otani Makuhari, where ceremonial events were held starting with a ribbon-cutting ceremony notifying the opening of the exhibition and the announcement of CEATEC AWARD 2015 Ministerial award winners.

The reception was attended by a total of 451 executives and key personnel from government agencies including State Ministers from MIC and METI, officials from the Cabinet Office, and congressmen, as well as broadcasters like NHK, academic and scholarly members, user companies and exhibitors. Before and after the Opening Reception, VIPs took a tour around the booth areas to see for themselves and shared the power of innovation integrating the latest and leading-edge technologies.



Welcoming Speech Representing the CEATEC JAPAN Executive Board

Shigeaki Mizushima, Chairman of the CEATEC JAPAN Executive Board

As we look about us today, and being aware of the upcoming 2020 Summer Olympics and Paralympics in Tokyo, it is clear that not only are the uses of IT/electronics multiplying but so too are the links with other fields and industries. Lifestyles are improving and we are witnessing dramatic advances in social productivity. To reflect these trends and to be in closer alignment with government policies, CEATEC JAPAN is starting afresh as a CPS/IoT exhibition this year. As the first step, this year we have created the NEXT Street Special Exhibit to demonstrate advanced technologies and services and show how they will impact our lives, for example, with IoT driven by big data. Furthermore, we will continue to strengthen collaboration and coordination with other industries, emerging and overseas companies through gathering and supplying of information. We are also committed to further enhancing these very capabilities, working together with the Tokyo Motor Show." (Excerpted)



Congratulatory Speech by Guests of Honor

Mr. Kosaburo Nishime, State Minister for Internal Affairs and Communications

"It is almost three years now since the inauguration of the Abe administration. Thanks to the various Abenomics initiatives and the progress made by our corporations, the virtuous cycle is clearly in motion and Japan's economy has begun to recover its strength. We believe that making the most of ICT is important as a foundation for supporting Abenomics, now in its second stage. The Ministry of Internal Affairs and Communications for its part is promoting the use of ICT aimed at the creation of new innovations. We are comprehensively adopting initiatives designed to foster adaptation to the IoT age, employing ICT to find solutions to the issues confronting society, while strengthening and developing ICT competitiveness in the international arena.

We are committed to realizing ICT throughout society. At CEATEC JAPAN visitors will be able to learn about various new applications of ICT. Also, a keyword for CEATEC JAPAN is 2020, the year of the Tokyo Olympics and Paralympic Games, and this is really an ideal opportunity to highlight the most advanced ICT in the world. I look forward to seeing increased cooperation between industry, universities and government ministries and agencies as we all work towards realizing ICT throughout society." (Excerpted)



Dr. Daishiro Yamagiwa, State Minister for Economy, Trade and Industry

"I am truly surprised by how much our world can change in just one year. Japan is fast becoming the foremost country in the world to tackle issues involving new technologies, and in finding solutions for them we are contributing toward the development of not only Japan but also mankind. Terms like IoT, big data and AI have already become part of our daily vocabulary. Artificial intelligence is without doubt responsible for an industrial revolution. We are surely going to see AI as a part of our lives ten years hence or even six months hence. The big data gathered from sensors will be analyzed by AI to provide the feedback for improving our lives.

Looking ahead at such a future, I trust that the companies exhibiting at CEATEC JAPAN are collectively riding, harnessing the wave of IoT vigorously and proactively. A public/ private-sector approach has in fact been already launched. At this event there is a special exhibit that specifically focuses on this wave, and I sincerely hope that CEATEC JAPAN will continue to grow and develop as this society of the future evolves." (Excerpted)





This year marked the 5th CEATEC AWARD ceremony to date. These awards are given to products, technologies and services exhibited at CEATEC JAPAN, and this year there were 81 entries from participating exhibitors and the following were given the distinguished awards.

Awarded products, technologies, and services are introduced globally and further heightening their value.







Review Panel's Overall Assessment

CEATEC AWARD2015 Review Panel – Masanori Koshiba,

Chairman of the Institute of Electronics, Information and Communication Engineers (IEICE) This year there were more entries than last year, spanning a wide range of fields in IT & electronics, from upstream to downstream, and it was extremely difficult for the panel members to pick award winners. Entries selected for the Grand Prix and Semi-Grand Prix awards, as well as the Review Panel's Special Award, excelled in the innovation and extraordinary technical capabilities they demonstrated. The Review Panel selected technologies and products deemed representative of the sort of innovation Japan is capable of, and worthy of a global audience. But, in addition to the award winners, there were many excellent entries of great diversity, reflecting the future potential of IT & electronics. They were sterling examples of the commitment and hard work of the many researchers and engineers. There is a bright future for CEATEC JAPAN and the CEATEC AWARD. (Excerpted)

Review Panel Members of the CEATEC AWARD 2015 (no specific order)

Masanori Koshiba (Chairman, the Institute of Electronics, Information and Communication Engineers) Atsumichi Murakami (Manager of Planning Office/ Commissioner, Institute of Electronics, Information and Communication Engineers)

Yasuhiro Shiraki (Honorary Member of the Japan Society of Applied Physics) Masayuki Sugawara (Vice-chairman of the Institute of Image Information and Television Engineers)

Toshiyuki Nakata (The Information Processing Society of Japan)

Sei-ichi Shin (The Institute of Electrical Engineers of Japan)

Tetsuya Muroyama (Senior Commentator, Japan Broadcasting Corporation NHK)

Waichi Sekiguchi (Editorial Writer, Nikkei Inc.) Tetsushi Hayashi (Chief Researcher, Nikkei BP ICT Innovation Research Institute/ Nikkei BP Institute of

- Infrastructure / Nikkei BP CleanTec Institute, Nikkei BP, Inc.) Makoto Nishisaka (Vice-President of Operations and General Manager, Industrial Technologies Business Sector, IT media Inc.)
- Observer for Ministry Awards screening (In the order of establishment)
 Ministry of Internal Affairs and Communications

Ministry of Economy, Trade and Industry

The CEATEC INNOVATION AWARDS 2015, "As Selected by US Journalists"

On October 9, the CEATEC INNOVATION AWARDS, "As Selected by U.S. Journalists" award ceremony was held. Each year an independent panel of U.S. journalists thoroughly reviews the technologies, products and services of exhibitors at CEATEC JAPAN and selects prize winners. This year, eight U.S. journalists first chose 27 finalists; after a further review, the winners of 9 different category awards were selected. The top award, the Grand Prix, went to Mitsubishi Electric's Technologies Supporting Tsunami Radar Monitoring.



Category	Product/Technology/Service	Recipient
Grand Prix	Technologies Supporting Tsunami Radar Monitoring	Mitsubishi Electric Corporation
Home Entertainment	Wearable ring-type computing device	ALPS ELECTRIC CO.,LTD/16Lab
Electronic Components	Lazurite Fly	ROHM Co., Ltd.
Digital Imaging	Thirty Meter Telescope(TMT)	Mitsubishi Electric Corporation
Software, Computing and Networking	WallSHOP: Smartphone-interlocked digital signage for shopping	Rakuten,inc.
Mobile Technology	RoBoHoN	Sharp Corporation
Transportation	Power Exporter 9000	Honda Motor Co.,Ltd.
Health and Household	Omron's "Family View"	OMRON Corporation
Smart Community	Technologies Supporting Tsunami Radar Monitoring	Mitsubishi Electric Corporation
Industrial Design	Free-Form Display Technology	Sharp Corporation



Details of Awards

A Panel of Judges of the CEATEC INNOVATION AWARDS 2015

Hubert Nguyen, Chairperson — **Co-founder, Ubergizmo.com** Joshua Fruhlinger — **SVP, Defy Media/MadeMan.com** Tom Samiljan — **Journalist, Editor, and Web Producer** Tim Stevens — **Editor-at-Large, CNET** Richard Lai — **Senior Editor, Engadget** Auri Rahimzadeh — **Writer, Director of Consulting, Microsoft Services at Eleven Fifty** Keiko Tsuyama — **Freelance Journalist based in New York, former Kyodo News reporter** Steve Greenberg — **Reporter, NBC Today Show**

NEW Special Exhibition

Introducing various angles on cutting-edge IT & electronics connected across a wide range of areas in a new convention style –

CEATEC JAPAN brims with first-ever experiences of technologies and plans for brand new businesses!!

Executive Convention

Sessions for executives were held including the opening reception, guest and keynote speeches, etc.
 CEATEC AWARD Ministerial awards announced

■ NRI Hackathon@CEATEC JAPAN 2015 Planning: Nomura Research Institute (NRI)



10.7 Wed

10.8 Thu

10.9

Fri

"Hack for Money – Let's harness IoT to change the way we deal with money!" Hackathon final was held at CEATEC JAPAN venue. The first prize went to UniX while Mashroom took the jury's special award. Also, Nomura Securities awards went to Keel and Acht Geld, JCB award to UTJ ALLStarts and Tokio Marine & Nichido Systems award to MoneySmart.



Technology Convention

Engineers Interaction Seminar and Guided Tour

This tour was held under the topics of IoT, mobility, and wearables. Each of the 3 seminars was packed and guided tour was also a success.

- Various sessions for technical experts and engineers were held
- Winners of CEATEC AWARD category awards and CEATEC Innovation Awards announced



Next Generation Convention

Guided Tours for Next-generation Engineers

For the first time, the tour gave students a chance to communicate directly with engineers active on the forefront of product development.

Cooperation : Forum Engineering

Organizer/Support : IT Media (EDN Japan, EE Times Japan, and MONOist)

Industry Research Seminar for University Students "Glamour and Role of IT/Electronics Industry"

Front line engineers in the field talked deeply about their experiences in their careers. Number of participants : 156 Sponsored by : JEITA Study Group - Fostering of HR in IT/Electronics Cooperation : Sharp, Mitsubishi Electric, Yokogawa Electric, Alps Electric, TDK, Kyocera Communication System

SPACE ROBOT CONTEST

With a theme to propose scouting of "global talent capable of manipulating ICT" and a cultivation model of next-generation talents, three programs including "standalone robot programming trial (experiment classroom)", Space Robot Contest, and Global Issue Project Report were held, which gathered a total of 68 elementary to university students. Sponsored by : Junior Association of Future Scientists (JAFS) Organizer : Inter Group Corporation (English Robot Academy), Science Lab Co., Ltd.

All-Japan Robot Sumo Tournament, Kanto-Division Tournament

The Kanto-division High-school Tournament of All Japan Robot Sumo Tournament, which started 23 years ago, was held on the last day of CEATEC JAPAN. The students tried hard to outdo each other with their robots' performance and become the Yokozuna champion. Organizer : Fujisoft Inc. and the National Association of Principals of Technical Senior High Schools









10.10 Sat

Experience linkages between IT/electronics and new fields realized by CPS/IoT and smartification

Open Stage

Open Stage hosted a total of 34 sessions/ceremonies during the exhibition, including IoT/robot/wearables sessions and CPS/IoT themed sessions.



NEXTstreet

NEXT Street

Planning : JEITA



In addition to IT/electronics companies, corporations in the service industry, local small and midsize firms, and IoT-related ventures collaborated to introduce how will our lives and society change with CPS/IoT through different fields, allowing

3D Printing@home / Robot @ Home

Planning : MecklerMedia A company that has held events showcasing robots and 3D printers in New York, London, Shanghai and Singapore came to exhibit at CEATEC JAPAN for the first time.



Rcbot@home 3DPrinting@home @ CEATEC powered by **RcboUniverse**

at CEATEC powered by 3D PRINTING

HATS PLAZA

Planning : Communications and Information network Association of Japan (CIAJ)



The HATS Conference exhibited demonstration of interconnection between latest communications equipment from a range of manufacturers, and offered stage presentations.

Content Experience Zone

Planning : Ultra-Realistic Communications Forum (URCF)

Introduction of 3D applications and content made possible through the latest in ultra-high presence 3D video technologies, multi-viewpoint video and five-sense, multi-sensory content as well as telework technologies.



Chamber of Commerce Business Square



Planning : Tokyo Chamber of Commerce and others

Members of the Chamber of Commerce introduced their products, technologies, and services.

Venture & University Area

This year the exhibition area has expanded drastically with participation by 54 companies/organizations. The area gathered venture companies and academic institutions possessing innovative technologies like CPS/IoT.



visitors to get a glimpse of advanced services and technologies that are ahead of the times.



NHK/JEITA Booth

Planning : NHK, JEITA Exhibits included demonstration on 8K satellite broadcasting, a wide-variety of Hybridcast content, and introduction of a path towards practical-level 4K broadcasting on cable television. Also the popularizing



high-resolution audio was introduced in an easy-to-understand way.

CSAJ Software Innovation Plaza

Planning : Computer Software Association of Japan (CSAJ)

The CSAJ made its exhibits as an organization of vendors of packaged software (planning and developmentoriented software) to drive innovation and the IT shift in Japan.



Cloud Computing Plaza

Planning : Cloud Business Alliance (CBA)



Exhibits included energy-saving DC composition, smart device application and deployment management, business systems, and statistics utilization systems etc.

Programmable Device Plaza

Planning : Programmable Device Committee A series of mini-stage sessions and exhibits was introduced on the importance of technologies in achieving applications related to everything from design through to mounting.



WEB Virtual Exhibition (Oct 13 - Dec 31)

As a tool for efficient communications between exhibitors and visitors, and to promote new business, CEATEC JAPAN opened an online virtual space.



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Exhibition Category

Lifestyle & Society Stage

Lifestyle & Society Stage presented the ways of living and societies of tomorrow with seamless deployment into a range of industries across all kinds of lifestyle scenes, and introduced technologies, products and services that gained attention from around the globe, and that will make our lifestyles more comfortable and fulfilling.

Information & Communications Equipment/Mobile Devices Mobile phones (Cellular phones, Smartphones, M2M communication modules, Public PHS), Electronic tablet devices, (Tablet PCs, Electronic dictionaries, Electronic books, Portable game players, others), Wearable devices, Servers, storage, PCs, Disk storage units, Portable game players, others), Wearable devices, Servers, storage, PCs, Disk storage units, Signage, Printers, Image scanners, OCRs, Banking terminals, Handy terminals, Wireless communication technologies and products, (Bluetooth*, Zigbee, NFC, Transferlet, Others), Wireless LAN technologies & products, Broadcasting equipment, Telephones (Conventional, Answering phones, Cordless handsets, Pay phones), Push-button phone devices, Wireless phones for company offices, VoIP-GW, Other telephone application devices (Security and Disaster-prevention phones), Fax machines, Other image communication devices (Video conferencing systems, Videophone terminals, etc.), Other information communication equipment and terminals, related products and services **Communication Networking related**

Communication Networking related Electronic automatic exchange (Switching stations, PBX), Transmission equipment, (Digital transmission equipment, Modems, Passive optical network (PON), Master controller (MC)), Other carrier equipment, Modernis, rassive optical network (PON), Master controller (MC)), Other carrier equipment (High frequency terminal apparatus, CATV transmission equipment, etc.), Fixed telecommunication equipment (Terrestrial, satellite), Base station communications devices, Network connectors (Routers, LAN switches, Hubs), Other network connectors (Repeaters, Gateway, LAN-related devices, etc.), components for communications or universe (Maharased terrestrial) Components for communications equipment (Relays and relay related equipment), Other communications network, related products and services

AV & Entertainment related

Video (High-definition and high-functional TVs, Projection displays, Off-screen type displays), Recorders and Players (Recorders/Players , Home servers, Storage, others), Video equipment (Digital cameras, Digital video cameras, Video equipment for medical use, etc.), Car AVC products (Car navigation systems, others), Audio equipment (Audio products, Surround systems, Audio players, High-resolution audio, etc.), Home-use projectors, Home theater systems, Professional video systems, Oversized video system, Digital cinema, Game platforms, Other AV & entertainment, related products and services puter software and se IoT solutions. co

Cloud computing, Data management, Big data, Network services, Network technologies, Education/academic related systems/services, Public/financial systems/services, Distribution/logistics systems/services, Traceability systems, M2M related systems and services, M2M device related, Other solution services, Software, Applications, Content, Other software and content, related products and services

Security related Cyber security, Defense technologies, Information security, Design and development, Operation management, Outsourcing services, Consulting, Other security related

Automotive and Mobility related EV, HEV, PHV, FCV, Electric-assisted bicycles, Next-generation vehicles, ITS, Telematics, Navigation, Automotive computers, In-car networking systems, Batteries, Energy systems, Smart mobility social systems, Environment-related technologies, Safety, Other mobility related products and services

Humanoid robots, Communication robots, Service robots, Autonomous transportation robots, Lifestyle-support robots, Autonomous mobile robots, Control technologies, Applied systems, Other robotics related products and services

HEMS (Home energy management system), BEMS (Building energy management system), FEMS (Factory energy management system), CEMS (Community energy system), FEMS (Factory energy management system), CEMS (Community energy management system), Wireless power supply equipment/system, Renewable energy, New energy Renewable energy, New energy Renewable energy, New energy storage (backup for home use), energy saving (energy-saving appliances), energy storage, Cackup for home use), energy saving (energy-saving appliances), variety of fuels, Green IT (Energy-saving hardware, Energy-saving software, Services), eco-office, Other environment and energy related products and services

Medical devices for the home, health-care equipment, beauty & grooming electronics, healthcare electronics, Fitness-related equipment, Remote medical systems, Medical information systems, Other healthcare-related products and services

me Applian

Kitchen electronics (Microwaves, Rice cookers, Refrigerators, etc.), Consumer electric products, HVAC, Lighting, Consumer electric products, HVAC, Lighting, Designer electronics, Interiors, Other home appliance-related products and services

Aerospace, Ships, Railroads, Broadcasting communications business, Construction related, Developers business, Logistics and distribution, Construction equipment, Agricultural equipment, Production/manufacturing technologies, Socio-infrastructure technologies, Agri-technologies, Industrial technologies, Nanoelectronics, Nanotechnology, Biometrics, Biotechnology, Science and technology, Leading-edge Technology, Element technology, Research presentations, Service-based businesses, Cross-sector cooperation, electoral assets, human resources, Municipal & regional industries, Books, Magazines, Software, Sories, Education, Bearch, Dublication Service, Education, Research, Publication

products and services not mentioned above Other lifestyle & socio-r

Key Technologies Stage

Key Technologies Stage showcased the world's leading electronic components and devices, as well as batteries, materials and equipment supporting innovation in a wide range of industries. This stage was noted as "an exhibition of the world's leading electronic components and devices.'

Passive components

Capacitors, Resistors, Iransformers, Inductors, Noise-reducing components, Fuses, OSCs/ Crystal oscillators/Oscillators/Timing devicesOSCs/Crystal oscillators/Oscillators/, Timing devicesOSCs, Compound components, Other passive components (Ceramic-applied components, etc.)

Connecting components Switches, Connectors, Relays, Optical parts, Other connectors

Acoustic transducers, Sensors, Actuators, Compact motors, Other transducers

Adapters, Chargers, Switching power supplies, Other power source-related items High-frequency parts re

Filters, High-frequency modules, Other high-frequency parts

Semiconductor Devi

Discreet (discreet semiconductors), Optoelectronics (optical devices), Microwave devices, Sensor/Actuators, IC (Integrated circuit), Hybrid ICs, System LC (I SoC), Power semiconductors, MEMS, Semiconductor design software, Other semiconductor devices Display Devices

LCDs, Electrochromic display (ECD), Inorganic/organic electroluminescent (EL) displays, Organic EL lighting panels, LEDs, LED elements, FED displays, VFDs, Projection displays, Off-screen type displays, 3D displays, Electronic paper display, Flexible display, Laser display, Touch & Interactive display, Foldable display, Other display devices

Fuel cells, Lithium-ion batteries, Nickel-hydride batteries, Solar cells/modules, Other battery-related items

Materials & Electronic Materials related

Metal stock, Functional materials, Ceramic materials, Mounting circuit materials, Magnetic materials, Display materials, Semiconductor materials, Electronic materials and stock Other materials and electronic materials

Devi

Measurement instrumentation, Inspection and test equipment, Manufacturing equipment, Electronic component mounting machines, equipment & systems; Electronic packaging devices, components & materials, Other equipment Electronic Circuit related

Electronic circuit board, Electronic circuit mounting board, Other electronic circuit related Social systems & leading-edge technology

Car electronics, Environmental/energy-related technologies, Health care/medical electronics, Nanoelectronics, Nanotechnology, Biometrics, Biotechnology, Science and technology, Leading-edge Technology, Element technology, Research presentations, Cross-sector cooperation, electoral assets, human resources, Municipal & regional industries, Books, Magazines, Software, Service, Other technology-related

Other key technology related products and services not mentioned above

Special Exhibition : NEXT Innovation Area

Creating platforms from electronics and information communications technologies to achieve "the smart." Introducing forward-looking proposals for new social models and visions, CEATEC JAPAN was in focus for its new directions.

Automotive and Mobility related

EV, HEV, PHV, FCV, Electric-assisted bicycles, Next-generation, vehicles / Connected-car related / TIS, Telematics / Navigation / Automotive computers, In-car networking systems / Batteries, Energy systems, Smart mobility social systems, Environment-related technologies / Safety / Other mobility related products and services

Healthcare related

Medical devices for the home / Fitness-related equipment / Remote medical systems, Medical information systems / Health-care equipment, beauty & grooming electronics, healthcare electronics / Other healthcare-related products and services

Environment & Energy related HEMS / BEMS / FEMS / CEMS / Wireless power supply equipment / system / Renewable energy, New energy / Energy storage (backup for home use), energy saving (energy-saving appliances), energy generation (photovoltaic solar cells, fuel cells for the home), variety of fuels/Green IT (Energy-saving hardware, Energy-saving software, Services), eco-office / Other environment and energy related and erged erg and engines. office / Other environment and energy related products and services loT

IoT platforms / Software / Communications module / Communications circuit / Communications equipment / Communications technologies / IoT devices/ Sensors / Network technologies/M2M related /Others

Wearable related Wearable devices/related products/software applications/related parts/related technologies

Robotics related

Humanoid robots, Communication robots, Service robots, Autonomous transportation robots, Lifestyle-support robots, Autonomous mobile robots / Control technologies, Applied systems / Other robotics related products and services

Agriculture

Cloud system for agriculture / Production management system / Artificial light / Sensors, Networks / Remote monitoring, Remote operation, Remote control / Environmental control / Agricultural support system, Robot / Others

Aerospace related Remote sensing, Positioning system / Aerial photography technology / Communications system / Security system / Observation system / Related software / Others

Computer Software Service related

Cloud computing / Data management / Big data / Network services / Network technologies / Education, academic related systems, services / Public, financial systems, services / Distribution, logistics systems, services, Traceability systems / M2M related systems and services, M2M device related / Software / Applications / Content / Other software and content, related products and services

Transducers

Exhibition

Floor Map



NEXT — Today's Dreams, Future Realities



Floor Map





Exhibitor Directory (Alphabetical order / Those exhibitor names that are indented in the list are joint participants.)

LS Lifestyle & Society Stage

KT Key Technologies Stage

NEXT Innovation Area

КТ	5K76	adwelds corporation
NEXT	3N36	Al, Inc.
	1L17 2152	AICH Prelecture
(P) KT	6K111	ALPS ELECTRIC CO., LTD.
кт	6K108	ALPS LOGISTICS CO., LTD.
LS	2L73	AMK SP. z o.o.
КТ	5K49	Anritsu Corporation
KT	5K48	Aomori Prefectural Government
L.3	TLUS	Rusinesses
NEXT	3N01	Asukanet Co., Ltd.
LS	1L18	Basis Innovation Inc.
LS	2L82	BELLSOFT, Inc.
NEXT	3N22	Bluetooth SIG, Inc.
		CSR KK A Qualcomm Company
		Focus Systems Corporation
		GAILOGIC CORPORATION
		LAPIS Semiconductor Co., Ltd.
		Macnica, Inc.
		Texas Instruments Incorporated
		Vision Context Co. Ltd.
LS	1L13	BOE TECHNOLOGY GROUP CO., LTD.
LS	2L80	Boon Trading Japan, K.K.
KT	6K109	BSEF Japan
KI	5K59 5K59_5	Ningho Keno Electronics Co. Ltd
	5K59-10	Shenzhen Cenker Enterprise Ltd.
	5K59-1	Shenzhen Cylan Technology Co., Ltd.
	5K59-6	Shenzhen Roadrover Technology Co., Ltd.
14T	5K59-4	WALEX ELEC I RONIC (WUXI) CO., LI D.
	21.88	CEIEIRD III HOKUIIKU CES® 2016
() LS	1L09	CG Communications Co., Ltd.
		CEL Technology Limited
(P) NEXT	4N66	Chamber of Commerce Business Square
	4N66-07	Beiviouve Co., Ltd. Business Mentor Corp
	4N66-10	4DBalance Co., Ltd.
	4N66-02	GRAPS Co., Ltd.
	4N66-09	LABROS Inc.
	4N66-08	Mammy Go
	4N66-06	ONLY STYLE Inc.
(P)	4N66-01	SELTECH CORPORATION
-	4N66-03	TOKYO SYSTEM HOUSE Co., Ltd.
КТ	4K12	Chiba Prefecture
KT	4K12	
	2 49-7	China Electronics Fair/China Information
		Technology Expo
	2L49-5	Chun Lam Group (International) Limited
	2L49-2	Dong Guan Heng Yong Electronic Products
	2 49-13	Hinen Electronics(Shenzhen) Co., Ltd.
	2L49-8	New Leader Battery Industry (Deqing) Co.,
		Ltd.
	2L49-1	Shenzhen Healthcare Electronic
	21/10=12	Technology Co., Ltd. Zheijang Hive Electronics Co., Ltd.
	2L49-3	Zhuhai hi-tech industrial development zone
		Demonstration base of software
		and integrated circuit foreign trade
	11/01 5	transformation and upgrading
	4K01-7	CHONGOING KAIGE EI FCTRONICS (O ITD
	4K01-16	DSC (GUANG ZHOU) CORPORATION
	4K01-8	Hangzhou Dengxin Tech Co., Ltd.
	4K01-14	Lei Xin Da Electronics (ShenZhen) Co., Ltd.
	4KU1-3 4K01-1	SHEINZHEN AV-DISPLAY CO., LID. Shenzhen linghua Displays Co., Ltd.
	4K01-15	SHENZHEN RIEDA I CD CO., ITD.
	4K01-13	Tone Parts Electronics Co., Ltd.
	4K01-6	Well Ascent Electronic(Ganzhou) Co., Ltd.
	4K01-2	Yuehua Holding Group Co., Ltd.
TOT NEXT	-+1107	Aspex Inc.
(*)		Bplats, Inc.
		Chuo System Corporation
		Cloud Business Alliance
		EWM Factory Ltd
		FIT Pacific, Inc.
		FUSION COMMUNICATIONS CORPORATION
		Future Facilities KK
		GMU Globalsign K.K.

	losoft Japan K K
	KAMOME Engineering Inc
	M·Soft Co. Ltd
	NEURONET Inc.
	NTT Communications Corporation
	Procube Co.,Ltd
	ReserveLINK Co., LTD
(F)	Sanwa Comtec K.K.
(ShinMaywa Soft Technologies, Ltd.
	Smilevvorks inc. Thinca coultd
	Tsukaeru net Co. Ltd
	UNIBITA Inc.
	Vanten K.K.
	Web Service Development Inc.
	Xseed Co., Ltd.
кт 6К101	CLOVER DISPLAY LIMITED
LS 1L03	Communications and Information network
11.00	Association of Japan
	COSMO SOUND CO., Ltd.
¹⁵ 2L30	CSA I Software Inpovation Plaza
	Mamezou Holdings Co. Ltd
	Mamezou Co., Ltd.
	Sense Things Japan
	Chepro Corporation
	NIPPON SYSTEM KAIHATSU CO., LTD.
	Nihon Knowledge Co., Ltd.
The Flynn	FORUM8 Co., Ltd.
KI 5K65	CTBEKINET SYSTEMS CO., LTD.
0KIIU (1) IC	DEMPA PUDICATIONS, INC.
1 2L41	
LS 2L91	DPT CO., LTD.
LS 2L44	dts Japan, Inc.
LS 2L42	DX Antenna Co., Ltd.
💵 3N41	DXRACER (ROOMWORKS INC.)
кт 4К14	DYNACAST
() III 3N23	ECHONET CONSORTIUM
LS 2L65	EISAN CO., LID.
49 m 3N46	
	SEIKO EPSON CORPORATION
	Epson Sales Japan Corporation
<u>кт</u> 5К75	ERNI Electronics K.K.
LS 2L48	Family Inada Co., Ltd.
LS 2L27	FINDMAKER., LTD.
LS 1L07	FORUM8 Co., Ltd.
1 5K4/	Fujikura Ltd.
5K54	Fujitsu Limiteu
3N38	Futecinc
KT 5K79	GeBE Elektronik und Feinwerktechnik GmbH
KT 5K91	Grow Will Co., Ltd.
LS 2L95	G-Wearables
🛞 KT 5K50	HAMAMATSU PHOTONICS K.K.
🋞 🖪 1L02	HAIS PLAZA
	-PBX Comer
	NEC Corporation
	OKI
	·FAX Corner
	CIAJ Image Data Communication &
	Facsimile Committee
	•TTC Corner
	10G-EPON Corpor
	OKI
KT 5K42	Higashihiroshima City
KT 4K16	HIROSAWA SEIKI SEISAKUSHO CO., LTD.
LS 2L28	Hiroshima Television Corporation
💷 3N30	Hitachi High-Technologies Corporation
KI 5K63	HILIACHI METAIS, LTD.
00/1C 🚺 🐨	Honda Motor Co. Ltd
LS 21 53	Hong Kong Trade Development Council
LS 2L50	Huawei Japan
LS 2L81	HWTrek: Hardware Innovation Platform
LS 1L16	iCiooly Co., Ltd.
LS 2L78	ICSIL CO., LTD.
10 21 21	KOINOS CO., Ltd.
S 2L3 I	Village)
	Nago City
	Ginoza Village
LS 2L34	IFA (Messe Berlin GmbH)
LS 2L96	INBYTE CO., LTD.
20121	

LS 2L75	Information Processing Society of Japan
🛞 🎹 4N61	Information-technology Promotion Agency,
_	Japan (IPA)
LS 2L98-10	INNOBIZ ASSOCIATION
2L98-6	A&D 3D CO., LTD.
2L98-4	Cobontech Co., Ltd.
2L98-1	ELIM Co., Ltd.
2L98-9	Handiteds Co., Ltd.
2L98-5	Hyonjin Chemical
2L98-2	MEDICALDERAM IND CO., LTD.
21.98-7	Namyang Novitech Co. Ltd
21.98-3	OTS Co. Ltd
2230 5	INNOVA GLOBAL INC
LS 21 67	IT Verification Industry Association
KT 5K35	JAPAN AUTOMATIC MACHINE CO., LTD.
🛞 街 4K02	Japan Aviation Electronics Industry, Limited
💷 3N32	Japan External Trade Organization
	(Introduction of Sri Lankan IT companies)
<mark>кт</mark> 4К18	JAPAN FEDERATION OF ELECTRONIC PARTS
_	DISTRIBUTORS & DEALERS
KT 5K70	JAPAN MAGNETS INC.
KT 6K112	Japan Science and Technology Agency
-	S-Innovation
🌆 4N60	Japan Virtual Robotics Challenge
	New Energy and Industrial Technology
	Development Organization The National Institute of Advanced
	Industrial Science and Technology
💷 3N45	JAWBONE
Image: Single	JEITA/Smart Drive Technology
LS 2L39	Jorte Calendar & Organizer
LS 2L66	Kawamura Electric Inc.
💷 3N18	Kii Corporation
KT 5K67	KJ COMTECH
KT 5K88	Knowles Electronics Japan, K.K.
KT 6K125	KOA CORPORATION
кт 6К104	KODENSHI CORP.
LS 2L32	Kozo Keikaku Engineering Inc.
KT 5K90	KIL Corporation
KT 6K123	Rumamoto Institute for Photo-electro
VT EVOD	Viganics Kurimoto ITD
	KVOCERA Corporation
JIJZ	KYOCERA OPTEC Co. Ltd
	KTOCENTOT TEC CO.,ELU
	KY()(EBA (rystall)evice (orporation
	KYOCERA Crystal Device Corporation
	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation
	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co.
	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd.
	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation
	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation
KT 5K29	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation Kyoto Shisaku
₭т 5К29 ⊾51106	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation Kyoto Shisaku Lancerlink Co., Ltd.
KT 5K29 S 1L06 KT 5K64	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar CORP.
 IST 5K29 IL06 IST 5K64 IST 6K122 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOTO Shisaku Lancerlink Co., Ltd. LEADER ELECTRONICS CORP. LECIP SLP CORPORATION
 ≤ 5K29 ≤ 1L06 ≤ 5K64 <l< th=""><td>KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOTERA Solar Corporation KYOTERA Solar Corporation Lancerlink Co., Ltd. LEADER ELECTRONICS CORP. LECIP SLP CORPORATION MACE DIGHT CO., LTD.</td></l<>	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOTERA Solar Corporation KYOTERA Solar Corporation Lancerlink Co., Ltd. LEADER ELECTRONICS CORP. LECIP SLP CORPORATION MACE DIGHT CO., LTD.
€ 5K29 € 1L06 5 5K64 € € 6K122 € 6K114 1 3N55 € 5K61	KYOCERA Crystal Device Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Display Corporation KYOCERA Solar Corporation MAC EIGHT CO., LTD. MAGEINCY
 ≤ 5K29 ≤ 1L06 ≤ 5K64 <l< th=""><th>KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Solar Corporation KYOCERA Solar Corporation KYOTO Shisaku Lancerlink Co., Ltd. LEADER ELECTRONICS CORP. LECIP SUP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation</th></l<>	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Solar Corporation KYOCERA Solar Corporation KYOTO Shisaku Lancerlink Co., Ltd. LEADER ELECTRONICS CORP. LECIP SUP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation
 I 5K29 I 1.06 I 5K64 I 6K122 I 6K114 I 3N55 I 5K61 I 3N43 I 69 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Solar Corporation KYOCERA Solar Corporation KYOTO Shisaku Lancerlink Co., Ltd. LEADER ELECTRONICS CORP. LECIP SLP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner
 IS 5K29 IL06 IS 5K64 IG 6K122 IG 6K124 IS 7K61 INV55 IS 661 INV55 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MAC EIGHT CO., LtD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News
(1 5K29 (1 1L06 (1 5K64 (2 16K122 (1 6K112 (1 6K114 (1 3N55 (1 5K61 (1 3N43 (1 2L69 2L69-3 2L69-1	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MAC EIGHT CO., Ltd. LECIP SLP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd.
 ≤ 5K29 ≤ 1L06 ≤ 5K64 ∞ 1 6K122 ∞ 6K114 ∞ 3N55 ∞ 5K61 ∞ 3N43 ≤ 2L69 2L69-3 2L69-1 2L69-2 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MAC EIGHT CO., Ltd. LECIP SLP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation
 ≤1 5K29 ≤1 1.06 ≤5 5K64 €1 6K122 ≤1 6K114 ≤1 3N55 ≤5 5K61 ≤1 2.69 2.69-3 2.69-3 2.69-2 ≤2 1.89 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Communication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MAC EIGHT CO., Ltd. LECIP SUP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Merci Corporation
 SK29 1L06 SK64 SK64 SK61 SK61 SK61 SN43 SL69 2L69-3 2L69-1 2L69-2 2L89 2L77 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MAC EIGHT CO., Ltd. LECIP SUP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Merci Corporation Metropolice Inc.
 ≤1 5K29 ≤3 1L06 ≤3 5K64 (≤3 6K122) ≤3 6K124 (≤3 6K124) (≤3 6K144) (≤3 15K61) (≤3 15K61) (≤2 169-3) (≤3 169	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Connunication Systems Co., Ltd. KYOCERA Solar Corporation KYOTERA Solar Corporation KYOTERA Solar Corporation KYOTERA Solar Corporation KYOTERA Solar CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE ELECTRONICS CO., LTD.
 ≤1 5K29 ≤1 1L06 ≤1 5K64 ≤1 6K122 ≤1 6K124 ≤1 6K124 ≤1 3N43 ≤2 L69-3 ≥L69-3 ≥L69-2 ≤2 L89 ≤3 2L77 ≤1 5K68 ≤3 3N44 ≤3 2L49 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Merci Corporation Metropolice Inc. MIE ELECTRONICS CO., LTD. Mirai Translate, Inc.
 ISK29 IL06 ISK64 ISK64 ISK64 ISK61 SN55 SK61 SN43 2L69-3 2L69-1 2L69-2 2L89 2L77 SK68 SN44 SN44 SN42 IL12 	KYOCERA Crystal Device Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MAC EIGHT CO., Ltd. LEOP SLP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metri Corporation Metri Corporation Metri Corporation Metri Corporation Metri Corporation Mira Translate, Inc. Mitrubic Floatic Corporation
 ≤ 5K29 ≤ 1L06 ≤ 5K64 (≤ 5K64 (⊂ 6K122 (⊂ 6K114 (⊂ 3N43 (⊆ 2L69 2L69-3 2L69-2 (⊆ 2L89 (⊆ 2L89 (⊆ 2L89 (⊆ 2L89 (⊆ 2L89 (⊆ 2L89 (⊆ 3N44 (⊆ 3N42 (⊆ 3L113 (⊆ 2L128 (⊆ 3L128 (⊆ 2L128 (⊆ 3L128 (⊆ 3L128 (⊆ 3L128 (⊆ 4L128 	KYOCERA Crystal Device Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MAC EIGHT CO., Ltd. LEADER ELECTRONICS CORP. LECIP SUP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE ELECTRONICS CO., LTD. Mirai Translate, Inc. MIRAISENS, Inc. MITSU MIE ECTRIC CO. LTD.
 ≤1 5K29 ≤1 1L06 ≤5 K64 (≤1 5K64 (≤1 6K112 (≤1 6K114 (Ξ 3N43) (≤2 L69-3) 2L69-2 (≤ 2L69-3) 2L69-2 (≤ 2L89) (≤ 2L77) (≤ 5K68) (Ξ 3N44) (Ξ 3N44) (Ξ 3N44) (Ξ 3N44) (Ξ 3N44) (Ξ 3L113) (Ξ 6K128) (Ξ 5K3) 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Connunication Systems Co., Ltd. KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MAC EIGHT CO., Ltd. LECIP SUP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE LECTRONICS CO., LTD. Mirai Translate, Inc. MIRAISENS, Inc. MITSUMI ELECTRIC CO., LTD.
 ≤1 5K29 ≤1 1.06 ≤1 5K64 (≤) 6K122 ≤1 6K114 ≤3 N43 ≤2 2L69 2L69-1 2L69-2 ≤2 2L89 ≤2 2L77 ≤5 5K68 ≤3 N44 ≤3 N44 ≤3 N42 (≤) 5K33 ≤1 14 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KUCERA Solar CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogvo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE LECTRONICS CO., LTD. Mirai Translate, Inc. MIRAISENS, Inc. MISUBIE CONTACOLUCE MOTOYA CO., LTD.
 I 5K29 I 1.06 SK64 G 6K122 G 6K124 G 6K124 SN55 SK61 SN43 2L69-3 2L69-3 2L69-1 2L69-2 2L89 2L77 SK68 SN44 SN42 SN42 S1113 G 6K128 SK33 S114 G K129 	KYOCERA Crystal Device Corporation KYOCERA Chemical Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar CORPORATION MAC EIGHT CO., LtD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE ELECTRONICS CO, LTD. Miraui Translate, Inc. MIRAISENS, Inc. MISUBISH ELECTRIC CO., LTD. MOUBIC MUrata Manufacturing Co., Ltd.
 1 5K29 1 106 1 5K64 1 5K64 1 6K122 1 6K14 1 3N55 1 5K61 1 3N43 2 2L69-3 2 2L69-1 2 2L69-2 2 2L69 2 2L69 2 2L69 2 2L69-2 2 2L69 2 2L69 2 2L69 2 169-2 2 169-2 2 169-2 2 169-2 2 169-2 2 169-2 2 169-3 2 169-4	KYOCERA Crystal Device Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation MACEIGHT CO., Ltd. LEADER ELECTRONICS CORP. LECIP SLP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE ELECTRONICS CO, LTD. Mirai Translate, Inc. MISUBIS Electric Corporation MITSUMI ELECTRIC COL, LTD. MOTOYA CO, LTD. MOTOYA CO, LTD. MURAI Manufacturing Co, Ltd. Mynavi Corporation
 ≦ 5K29 ≦ 1L06 ≦ 5K64 ☞ 5K64 ☞ 6K122 ☞ 6K124 ☞ 3N55 ⊆ 5K61 3N43 ⊆ 2L69-3 ⊇L69-2 ≦ 2L89 ⊆ 2L77 ⊆ 5K68 3N44 3N42 ☞ 3 81113 ☞ G 6K128 < ≤ 1L14 	KYOCERA Crystal Device Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KORENELECTRONICS CORP. LECIP SLP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE ELECTRONICS CO, LTD. Mirai Translate, Inc. MIRAISENS, Inc. MITSUMI ELECTRIC CO., LTD. MOTOYA CO., LTD. MOUBIC Murata Manufacturing Co., Ltd. Mynavi Corporation
 ≤ 5K29 ≤ 1L06 ≤ 5K64 ⊕ C 6K122 ≤ 6K114 ⓐ 3N55 ≤ 5K61 ⓐ 3N43 ≤ 2L69-2 ≤ 2L69-2 ≤ 2L89 ≤ 2L77 ≤ 5K68 ⓐ 3N44 ⓐ 3N42 ⊕ S 3L113 ⊕ C 6K128 ⊆ 5L89 ≤ 1L14 ⊕ C 6K129 ≤ 2L86 ⊆ 1L4 ⊕ C 6K121 ⊕ C 5K41 	KYOCERA Crystal Device Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Display Corporation KYOCERA Solar Corporation MAC EIGHT CO., Ltd. LEOP SLP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE ELECTRONICS CO, LTD. MIRAISENS, Inc. MITASUMI ELECTRIC CO, LTD. MOTOYA CO, LTD. MOUBIC Murata Manufacturing Co., Ltd. Mynavi Corporation Nagano Prefecture National Instruments Japan Corporation
 SK29 SK4 SK64 SK61 SK61 SK61 SK61 SK61 SK63 SL69 SL69-12 SL89 SL77 SK68 SN44 SN44 SN44 SN44 SN44 SN44 SN44 SK63 SL113 SK33 SL14 SK33 SL14 SK68 SK41 SK36 	KYOCERA Crystal Device Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Display Corporation KYOCERA Solar Corporation MAC EIGHT CO., Ltd. LECIP SUP CORPORATION MAC EIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Merci Corporation Metropolice Inc. MIE LECTRONICS CO., LTD. Mirai Translate, Inc. MITSUMI ELECTRIC CO., LTD. MITSUMI ELECTRIC CO., LTD. MOTOYA CO., LTD. MOUBIC Murata Manufacturing Co., Ltd. Myaai Corporation Nagano Prefecture National Instruments Japan Corporation NBC Meshtec Inc.
 ≤1 5K29 ≤1 1.06 ≤1 5K64 (≤) 6K122 ≤1 6K114 ≤3 N55 ≤1 5K61 ≤3 N43 ≤2 2.69 2.69-3 2.69-3 2.69-1 2.692 ≤2 2.69 ≤2 2.69 ≤2 2.69 ≤2 2.69 ≤2 1.69 ≤3 1.13 (≤) 5K31 ≤1 1.14 (≤) 5K41 ≤1 5K41 <l< th=""><th>KYOCERA Crystal Device Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOTERA Solar Corporation KYOTERA Solar CORPORATION MACEIGHT CO., Ltd. LECIP SUP CORPORATION MACEIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE LECTRONICS CO, LTD. Mirai Translate, Inc. MIRAISENS, Inc. MISUBIS, Inc. MISUBIS, Inc. MISUBIS, Inc. MISUBIS, Inc. MUSUBIC MURAL Manufacturing Co., Ltd. Mynavi Corporation Nagano Prefecture National Instruments Japan Corporation NBC Meshtec Inc. NBC Meshtec Inc.</th></l<>	KYOCERA Crystal Device Corporation KYOCERA Connector Products Corporation KYOCERA Connector Products Corporation KYOCERA Display Corporation KYOCERA Solar Corporation KYOCERA Solar Corporation KYOTERA Solar Corporation KYOTERA Solar CORPORATION MACEIGHT CO., Ltd. LECIP SUP CORPORATION MACEIGHT CO., LTD. MAGENCY MARUBUN CORPORATION Mazda Motor Corporation Media Corner Automation-News Nikkan Kogyo Shimbun Ltd. SB Creative Corporation Metropolice Inc. MIE LECTRONICS CO, LTD. Mirai Translate, Inc. MIRAISENS, Inc. MISUBIS, Inc. MISUBIS, Inc. MISUBIS, Inc. MISUBIS, Inc. MUSUBIC MURAL Manufacturing Co., Ltd. Mynavi Corporation Nagano Prefecture National Instruments Japan Corporation NBC Meshtec Inc. NBC Meshtec Inc.
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With the Internet of Things, or IoT, currently making waves throughout the world, CEATEC exhibits CPS/IoT-related products and services at booths attached with "CPS/IoT" logo. CPS (Cyber Physical System) is a new concept targeting new value through information linkage between physical world and cyberspace, which includes IoT concept.

	Cabinet Office Cross-ministerial Strategic Innovation Promotion Program (SIP) Infrastructure Maintenance, Renovation, and Management •Regional Revitalization WESTUNITIS CO.,LTD connectFree k.k. SIRC Co. Ltd. Thinktube Inc. Nippon Software Knowledge Corp. Magellan Systems Japan, Inc. •IoT startup SHOWCASE powered by creww & SENSORS Creww inc. Nippon Television Network Corporation coconoe inc. STARRYWORKS Sony Music Entertainment(Japan) inc. THE GUILD YURU SPORTS PROCESS TECHNOL OGLES inc.
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	CyberAgent Crowd Funding, Inc. Future contribution project - Diversity Hackathon
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3N17-2	Artwork Co., Ltd.
3N17-4 3N17-1	Tokyo Metropolitan Industrial Technology
3N17-3	Research Institute Verification Technology, Inc.
LS 2L64	Ray Tron, INC.
KT 6K107 LS 1L10	RCL DISPLAY LTD. REPRESENTATIVE OFFICE IN JAPAN FOR
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LS 2L74	Robotic Increase Center
KT 5K20 00 3N40	ROHM Co., Ltd. Bozetta Corp
KT 6K98	RUBYCON CORPORATION
KT 4K19	Sangyo Times, Inc. Santek Japan Corporation
LS 2L33	SENSIRION Japan Co., Ltd.
() LS 1L11	SHARP CORPORATION
3N24 3N26	Shinko Shoji Co., Ltd. Shinoda & Makino Lab. the University of
	Tokyo
3N27	SilverStarJapan CO., LTG. Small & Medium Enterprises and Regional Innovation Japan

	КΤ	5K62	Socionext Inc.
	КΤ	6K119	SOFTOPIA JAPAN
	КΤ	5K37	SOLIDWORKS Japan K.K.
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(PŞ	KT	5K78	SUMTEC Inc
	кт	4K13	SUNGMUN ELECTRONICS CO., LTD.
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			LTD.
		6K97-10	SINPRO ELECTRONICS CO., LTD.
		6K9/-1/	LENOO ELECTRONICS CO., LTD.
		6K97-27	RIZUNK INTERNATIONAL CORPORATION
		6K97-18	VITEK DISPLAY CO., LTD.
		6K97-25	GI FAR TECHNOLOGY CO., LTD.
		6K97-11	WINSTAR DISPLAY CO., LTD.
		6K97-21	ELKA INTERNATIONAL LTD.
		6K97-24	AJATO CO., LTD.
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		6K97-08	T-GLOBAL TECHNOLOGY CO. LTD
		6K97-07	SHANPU CO., LTD.
		6K97-14	HIGHLY ELECTRIC CO., LTD.
		6K97-19	AKER TECHNOLOGY CO., LTD.
		6K97-09	TRANS ELECTRIC CO., LTD.
		6K97-05	YFC-BonEagle Electric Co., Ltd.
		6K97-00	IOLILES MILES COLLTD
		6K97-23	WALTER ELECTRONIC CO., LTD.
		6K97-03	U.K. TECHNOLOGY CORP.
		6K97-20	CHUNGYI ENTERPRISE CORP.
		6K97-16	ZINBY TECHNOLOGY CO., LTD.
		6K97-13	POLYMAX PRECISION INDUSTRY CO., LTD.
		6K9/-04	GI CONTACTICO., LID.
CPS	кт	6K126	TAIYO YUDENI CO. ITD
w.	KT	5K69	TAJIMI ELECTRONICS CO., LTD.
(PS	КΤ	5K60	Tamura Corporation
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	LS	2L36	TECHNO BRAIN Co., Ltd.
m	KT	5K32	Tektronix
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	кт	5K21	THINK I ABORATORY Co., I td.
	NEXT	3N58	3DPrinting@Home
		3N58-4	MecklerMedia Corporation
		3N58-2	AutonomouStuff
		3N58-3	Rotacaster Wheel Pty Ltd.
	кт	5K83	TOKALCOMMUNICATION INDUSTRY CO. LTD.
	KT	5K71	Tokvo Weld Co., Ltd.
			Tokyo Coil Engineering Co., Ltd.
	LS	2L97	Toshiba Samsung Strage Technology Korea
			Corporation
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101	кт	6K100	Transphorm Japan inc
	LS	2L94	TRIPLE ONE CORPORATION
			APE TECHOLOGY LTD.
_	LS	2L76	Tunisia Embassy FIPA
(PS)	КТ	6K127	Tyco Electronics Japan G.K.
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	LS	3L114	Ultra-Realistic Communications Forum
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			Rissho University
			KDDI R&D Laboratories Inc
			CHUKYO TV, BROADCASTING CO., ITD
			Sharp Corporation
			3Dragons, LLC.
			Parity Innovations Co., Ltd.

		State of the Art Technologies in Expression
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	3N50-4	American State Offices Association
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	3N50-1	Tesla Motors
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	4N65	Venture & University Area
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	4N65-41	EventRegist Co., Ltd.
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	4N65-48	Keio University Haptics Research Center
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Pick Up 1 Exhibition Trends



Lifestyle and Society Stage

The booths at the Lifestyle and Society Stage area covered a host of different sectors and technologies, from next-gen display and imaging technology that takes us past 4K to 8K and even 10K visuals, through to wearable technology that went beyond glasses, as well as small robots that showed startling evolution. We also witnessed several support devices that deliver safety and peace of mind, along with a washing machine that can fold your clothes for you – these are all advances that go beyond mere functionality – these are all devices designed to help us in our daily lives.

Key Technology Stage

High performance electronic components, with their ever-shrinking form factors and energy efficient designs that enable all different kinds of sensing devices, wearable technology and mobile tools – the essential technologies for CPS/IoT. These breakthroughs, along with the technologies that support automated driving and other new devices that will deliver what we think of as the NEXT stage in our technological lives are made possible due to global cutting edge electronic components and devices.

NEXT Innovation Area

This section consisted of IT and electronics breakthroughs that drive innovation in fields as diverse as the automotive world, health care provision, robotics and drones, to name but a few. The NEXT Innovation Area was where many leading technology solutions were on display.

Furthermore, as we approach the dawn of the era we refer to as IoT, the NEXT Innovation Area marked the start of this new epoch with a special section called NEXT Street, where visitors could see and experience the future of industries such as tourism, logistics and distribution, technology, infrastructure maintenance and regional rejuvenation. NEXT Street aimed to show how our lives would be enriched by these advances in 2020 and beyond. The NEXT Innovation Area formed a key part of the CPS/IoT exhibition as a whole.

4K and 8K Television Broadcast Technology primed for proliferation with the upcoming 2020 Olympics

The next generation of imaging technology will bring 4K into our homes and across the business world. At CEATEC JAPAN 2015, the exhibits aimed to show how 4K has already to some extent proliferated as well as how vendors are striving for better resolutions and superior image quality.

At the NHK/JEITA booth, the focus was on a concrete road map proposal for the adoption of 4K leading up to the 2020 Olympics. 4KBS is due to begin broadcasting in 2018 and there were examples of 4K broadcast technology at the booth. Furthermore, CEATEC JAPAN 2015 saw the first demonstration in Japan of the HDR capable 85 inch 8K display, complete with auto contrast



corrective technology.

Mitsubishi Electric Corp. demonstrated their RGB laser backlight television with BT 2020 specification video images. Compared with conventional video specifications, the BT 2020 specs offer a much broader color spectrum and the beautiful visuals drew plaudits from visitors to the booth.

The BOE Technology Group was exhibiting at their first CEATEC this year and they made their debut with the world's first 10K (screen resolution of 10,240 x 4,320 pixels) horizontal monitor and vertically mounted signage, along with a host of other 10K monitor sizes and designs.

Panasonic Corp. introduced its lineup of products and devices aimed at watching, capturing and storing 4K video. Their HDR capable high resolution next generation television, which can faithfully reproduce high dynamic range images, was showcased along with other products. Panasonic also exhibited their Ultra HD Blu-Ray Playback Capable Recorder DMR-UBZ1, which is due to go on sale in November 2015. The DMR-UBZ1 also took the CEATEC AWARD 2015 prize presented by the Minister of Economy, Trade and Industry.

At the end of October 2015, Sharp Corp. will begin mass production of 8K video monitors aimed at business users and the company took the opportunity at CEATEC 2015 to showcase their product range. Their 8K Super Hi-Vision Television, which features a wavefront synthesis sound system, was set up for demonstrations, as was the AQUOS 4K NEXT display, which detailed how Sharp would deliver screen resolutions superior to 4K. These exhibits ensured that the Sharp booth garnered a lot of attention at CEATEC 2015.

New proposals for panels – to switches and even architectural materials

Last year Sharp Corp. turned conventional wisdom – the basic premise that displays have to be rectangular – on its head, after they announced what they called Free Form Display (FFD) and this technology has evolved in the 12 months since the initial announcement. Many different proposals and ideas have come about thanks to FFD, such as using FFD panels for the central console display in an automobile. An FFD panel – the 12.2 curve type FFD – can be shaped to fit the central dome on a car dashboard. Combining an FFD with a dial controller has produced the FFD-UI, whereby the FFD is used to show the status and/or position of a machine or device. This groundbreaking development makes an intelligent switch out of the FFD, which can have all sorts of uses and purposes, such as a navigation aid, etc.

Sharp Corp. also exhibited see-through displays and mirror



displays at CEATEC JAPAN 2015. With the see-through displays, Sharp has achieved a transmission factor of 25%, and the Sharp booth at CEATEC introduced how these panels had been put to use in the platform doors at Toyosu Station on the Yurakucho Line of the Tokyo Metro.

BOE Technology Group brought a transparent display to CEATEC JAPAN 2015 made with a large-size transparent screen manufactured by Panasonic Corp. In addition to use as a regular television display, these panels can be used as a shop window, digital signage, or even just a window – it is so flexible it can be described as an architectural/building material that doubles as a display, which is a new type of product proposal that Panasonic is tabling at CEATEC. Furthermore, at the New Energy and Industrial Technology Development Organization (NEDO) booth, Japan Display Co., Ltd. were exhibiting their ultra thin EL display, which is a mere 0.05mm thick. Visitors to the booth were struck by the possibilities for a display panel that thin.

High definition video images coupled with high resolution audio

Technics (Panasonic Corp.) built a sound booth/audio room at CEATEC JAPAN 2015, so that visitors could experience firsthand what they call high resolution audio. A new proposal from Technics is the OTTACA SC-C500, a compact audio system for relaxed listening – the difference being that the listener no longer has to be directly in front of the speakers for peak audio performance. This is a product no solely for music enthusiasts, but for anyone who wants to enjoy excellent quality sound fidelity in comfort.



Over at the NHK/JEITA booth, 4K and 8K displays were on show and these were most ably complimented by outstanding audio reproduction, complete with a listening booth. This is a high resolution experience for the eyes and the ears.

Furthermore, Nichicon Corp. and Taiyo Yuden Co., Ltd. also exhibited high resolution audio headphones and earbuds at CEATEC JAPAN 2015. Nichicon Corp. wanted to emphasize that their condensers were mounted in all of the high resolution audio headphones and earbuds on display. The tweeters in the high resolution speakers were made possible by Taiyo Yuden Co., Ltd., who manufacture the laminated type piezoelectric actuators inside these audio units.

New proposals to reinvigorate consumer electronics



At CEATEC JAPAN 2015, the noticeable trend this year was the number of consumer and domestic electronics products and proposals on show. At the Lifestyles and Society Stage, the session presented by Seven Dreamers Laboratories, Inc. featured the Landroid, a fully automatic washing machine concept that is capable of folding your laundry once it has been washed and dried. This means the device has to be capable of picking up, opening out, recognizing, folding and putting away each piece of laundry, which is quite a challenge in terms of process and design. In the near future, companies such as Daiwa House Industry Co., Ltd. and Panasonic Corp. working in conjunction with Seven Dreamers Laboratories, Inc. will look to develop these fully automated laundry machines as commercial products. Each time the Landroid was demonstrated on the Life and Society Stage, a huge crowd of people turned up to see a vision of the future.

Under their corporate slogan of Better Living Tomorrow, Panasonic Corp. dedicated a section of their floorspace to products and ideas that will enhance our lifestyles in the near future. The vision encompassed a kitchen where all of the devices and appliances are networked together, making it simpler and easier to eat a balanced, healthy diet. In the dining room, a transparent screen can display video, offer color variations or simply remain transparent for diners to enjoy views of nature while they share time conversing and eating. In the living room, video and audio devices



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as well as sensors are deployed to provide the right ambience and information when needed, and the mood can automatically be adjusted depending on how many people are in the room. In the bedroom, a rank of sensors, such as facial recognition technology, will check your health and wellbeing, and interactive mirrors are on-hand to propose make-up tips and hints. All of these proposals were shown at CEATEC JAPAN 2015 along with their J concept series line of high quality consumer electronics and appliances.

Under the concept of "Getting Close to People" Sharp Corp. proposed a number of devices and products that come equipped with a human touch. These products all feature what Sharp Corp. refers to as the Kokoro Engine, which is at the heart of the Al interface. This works with sensing technologies and voice recognition, etc. – for example the next time you stop to put fresh groceries into your refrigerator, if it was equipped with the Kokoro Engine it could inform you of the foodstuffs that are close to their best-by date. A television, over time, could learn what specific programs and content a particular viewer enjoys to watch, and suggest recording certain programs – these are just some examples of the human touch applied to electro-domestic products.

At the NEXT Innovation Area, the Venture and University Area featured the AeroShield, a product designed by Eneforest Co., Ltd. which uses UV light to kill bacteria in a room.

Robots that made the Japanese phrase kawaii cool and cute

One area that outperformed the benchmarks from CEATEC JAPAN 2014 is communication tools that make use of IT technology. At CEATEC JAPAN 2015 there were many unique ideas and proposals in this field, many of which became the talk of the event.

RoBoHoN, a cellphone with a robot-like design that measures 19.5cm tall and weighs 390g, was a very popular attraction for visitors to the Sharp Corp. booth. RoBoHoN features voice recognition and facial recognition technology, and if you talk to RoBoHoN, the onboard Al will answer you back. RoBoHoN can also stand up, walk on two legs and even dance. RoBoHoN also features an onboard camera, which will actively seek out human faces and take photos, so RoBoHoN can serve as a robot cameraman. Inside the body is a projector which can display photos taken by RoBoHoN on a wall, etc. RoBoHoN connects to LTE and 3G networks, and can send and receive email. RoBoHoN is due to go on sale to the general public in the near future.

Yukai Engineering Inc. is a company engaged in robot design and manufacturing, and at CEATEC JAPAN 2015 they exhibited BOCCO, a communication robot capable of sending and receiving voice chat and messages via your smartphone. Couple BOCCO with a door sensor and information about door opening and closing direct to your smartphone. This is one way to keep track of younger children's comings and goings.



Omron Corp. exhibited under the banner "Human Vision Component *Kazoku Mesen* – from the Viewpoint of the Family" and this referred to networked cameras and various sensors placed into an anthropomorphic form that can detect and recognize facial features, etc. When a baby cries the device can issue an alert, or when a baby turns to face the camera it can detect the baby's face and take a photo to record the movement.

The one keyword common to all of these devices is the Japanese phrase "kawaii" (cute) – in the world of IT all the best communication technology, presented in the form of a set top box, will make most people think twice before talking to it. The form of these devices is an important factor and the Japanese value of "kawaii" has made these devices more approachable – it will be interesting to see how this develops going forwards.

Fresh and interesting proposals, such as a new type of watch/wearable device

Last year, at CEATEC JAPAN 2014, wearable technology caused quite a splash. In the 12 months since then, we have seen several different wearable devices hit the market. Let's take a look from the wristwatch-type wearables.

Seiko Epson Corp. has added PULSENSE devices that are BLE Beacon capable to their product lineup, and these wearables were on display at CEATEC JAPAN 2015. These devices are capable of collating the vitality data for several people in scenarios as diverse as a health and fitness club, a manufacturing plant or a building site. The beacon technology works over short distances and can be applied to a variety of different uses. BLE Beacon is expected to feature strongly in wearable devices in the near future.

Murata Manufacturing Co., Ltd. has put together a proposal of a wearable kit, consisting of temperature, light and air pressure sensors, as well as Bluetooth, NFC and wireless charging capabilities. In the same was as a watch movement, the kit can be customized and the aim is to make it simple to create and develop wearable products.



Taiyo Yuden Co., Ltd. showcased a wristband type of device at CEATEC JAPAN 2015, which consisted of a piezoelectric pressure wave sensor combined with an AYA-P module. The piezoelectric element module can detect directly any oscillations on a vascular wall, and this is data that can be used to detect or measure hardening of the arteries or discomfort, to mention just a few of its potential uses.

Sony Corp. has come forward with a number of unique ideas for the watch type wearable device due to its internal venture, known as the wena Project. The wearable devices on show at CEATEC JAPAN 2015 were all quartz timepieces from other manufacturers, but on closer inspection the wearable device was actually the band, or watch strap. Embedded in the strap is FeliCa technology, as well as notification functions from the wearer's smartphone, in

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addition to sensors that measure body readings and activity. One of the designers on the Sony side, Teppei Tsushima – a young man at 23 – comments: "I wanted to create something that paid due respect to the culture of wristwatches."

Many eye-catching and unique proposals for glasses type wearable devices

In addition to a raft of product proposals for consumer glasses type wearable devices, the focus is currently also on B2B proposals.

For example, the MOVERIO from Seiko Epson Corp. was exhibited at CEATEC JAPAN 2015 along with the so-called Smart Headset, which also includes a camera. The MOVERIO can be adapted to B2B work, such as in a plant or to carry out some form of picking task.

Murata Manufacturing Co., Ltd. came to CEATEC with their Cool Design Smart Glass, a concept model of smart glass designed and created in conjunction with Sabae City, Fukui Prefecture, a place famous for the manufacture of glasses. The aim was to implement an AR display along with the world's smallest switch module whilst losing none of the comfort or fashion sense of the glasses. The demonstration model at CEATEC was used to control electro-domestic products and a smartphone.

In terms of underlying technology for wearables, Fujitsu Limited and Mitsumi Electric Co., Ltd. came to CEATEC to show their retina scanning laser eyewear featuring QDL laser technology. Visitors to the booth simply pop these glasses on and as the device detects the wearers retina, the images shown on the eyewear are sharp for the wearer, regardless of any near- or far-sightedness. By the end of the fiscal year this is due to go on sale as a visual aid for people with weak or impaired vision, and it is expected that there will be other uses for this technology in the future.

TDK Corp. took the opportunity afforded by CEATEC JAPAN 2015 to display its SESUB technology implemented in the form of a glasses type wearable device. SESUB consists of an IC on a resin substrate with a crystal oscillator and condenser, etc. arranged along the outer edge of circuitry that is mounted on the substrate. This approach to arranging the components enables micro-miniaturization and maintains a low design profile, whilst delivering a module with excellent heat dissipation and noise control. This module is so compact it can be embedded into the arm of a pair of eyeglasses, or even into a chopstick. TDK Corp. also announced one of the smallest Bluetooth V4.1 SMART spec capable wireless communication modules – and both of these are expected to be essential devices for the IoT going forwards.



A new idea for using smart glass came from Kinki Nippon Tourist Co., Ltd. with their Smart Tourism concept. This is an idea that came about from a joint development project with a number of different companies, among them Seiko Epson Corp. The demonstration unit at CEATEC JAPAN 2015 came loaded with content about popular tourist locations, such as Edo Castle (the East Gardens of the Imperial Palace in Tokyo). Visitors to the booth were treated to an animation of the Ooku, the interior chambers, as well as a reconstruction of the old castle keep presented with AR, all viewed through a glasses type wearable device that serves as a guide around these famous locations. The content can be presented across a variety of different languages and can act as another layer of hospitality to extend to overseas visitors to Japan.

Wearable devices come in all shapes and sizes: rings, shoe soles, clips – to name but a few



Alps Electric Co., Ltd. came to CEATEC with their ring type wearable device OZON, developed in conjunction with 16Lab. OZON is still under development, and comes loaded with various kinds of sensor technology, such as the ability to sense movement in three dimensions and thereby recognize gestures, as well as pushing notifications of phone calls and emails received. OZON can also act as an electronic key, as well as a form of contactless payment.

Fujitsu Limited also brought their ring type wearable device to demonstrate at CEATEC, which weighs a mere 10g and yet is capable of receiving command inputs. Their ring tracks finger movements to decipher words and characters, and has a 95% success rate in terms of character recognition, as well as coming equipped with NFC technology.

Another item that garnered a lot of attention at the Fujitsu booth were the "next generation sensor shoes" – whereby sensors have been embedded into the sole of a shoe that are capable of gathering data that can then be used to track activity, health, etc. as well as more specific issues such as the wearers walking gait and how bad posture can be corrected. The data generated by these sensors can be used in any number of ways – the future is full of interesting ideas.

Kyocera Corp. brought TSUC to CEATEC, which is their unique take on a health-related device. TSUC is part of Kyocera Corp's concept of "daily support" and takes the form of a clip that can just be affixed to a pocket, etc. TSUC will then measure and record the activity of the wearer, and all this data is automatically uploaded to the wearer's smartphone, with the idea that TSUC will provide the daily support the wearer requires to keep on improving their active lifestyle. Also this technology allows the wearer to take their smartphone and by moving over half of the circumference of their waist, the amount of visceral fat can be ascertained and displayed.

Groundbreaking social infrastructure through the implementation of cutting edge technology

Mitsubishi Electric Corp. came to CEATEC JAPAN 2015 to showcase its elevator technology, the same technology that has been used in the elevators that will service the Shanghai Tower, which is due to be completed by the end of 2015 – elevators that will reach a world record speed of 1080m/min. The passenger car features what Mitsubishi calls Active Roller Guide technology, which reduces the vibrations generated at such high speeds. An actuator controls the interplay between the roller guide and the elevator shaft guide rail, reducing vibrations by more than half. At the CEATEC booth, Mitsubishi introduced the elevator car design, which is based on the study of fluid mechanics, as well as the fine ceramic shoe emergency brakes that have to be able to cope with temperatures of 1000°C due to the friction generated in the unlikely event of having to stop a speeding elevator car.

The Quasi Zenith Satellite System (QZSS) will start full scale operations in 2018 and the main manufacturer for this project is Mitsubishi Electric Corp., with the majority of operational tasks undertaken by NEC Corp. Both companies were at CEATEC to exhibit and explain their contribution to this project. QZSS satellites are launched into a specific orbit so that means they stay above or near Japan, and this means they can measure with great detail things like the shadows cast by mountain ranges and tall buildings, as well as measuring sea or water levels to the centimeterlevel of accuracy. The QZSS generates extremely accurate GPS that is of course essential for applications such as onboard car navigation systems, automated driving, confirming and tracking the location of trains, etc. QZSS will launch 4 satellites in 2018 and the full set of 7 satellites will be in orbit by 2023.

At this year's CEATEC JAPAN, one of the sectors to catch the eye was technologies related to emergency responses following a disaster. NEC Corp. has developed a sensor to detect and measure the amount of moisture in soil located in hilly slopes, which could be vital in providing some sort of early warning for a landslide. NEC Corp. are calling this the Landslide Countermeasure Support System. Simply placing these sensors on the hillside is enough to start the data flow. Previous incarnations would require a host of parameters to be inputted before any meaningful data was gathered, so the new technology has made a big difference in terms of cost and time.

Moreover, the winner of the CEATEC AWARD 2015 Minister of Internal Affairs and Communications Award was the Next-Gen Software Wireless Capable Emergency Mobile Network, whereby after a major disaster one can assume that mainline phone and communication networks are down. With this new next-gen emergency network, a wireless handset can be prompted to automatically create a live network, which can work over a number of frequencies, as well as connecting to the satellite phone network and IP networks.



A number of journalists from the US covering IT and electronics at CEATEC are asked to sit on a panel and given the task of choosing the winner of the CEATEC INNOVATION AWARDS, "As Selected by US Journalists". In 2015 the CEATEC INNOVATION AWARD Grand Prix went to Mitsubishi Electric for their radar tsunami monitoring and measuring technology. This is the first time technology has been developed that can use radar to measure the speed of currents on the surface of ocean water and extrapolate the likely size of a tsunami from this data – and issue warnings as appropriate before any visual confirmation of the tsunami from the shore.

Various ideas for tackling challenges related to energy

Kyocera Corp. brought the latest version of their automatic demand response (ADR) system to CEATEC JAPAN 2015. ADR looks to automate the steps between a demand issued to conserve power consumption through to the actual implementation and reporting. By using international standards and specifications for ADR, the system will automatically execute several steps for power optimization, including sending a power-saving request (DR signal) when electric power supply and demand become constrained, providing DR signal reception in homes and businesses, controlling electric power optimization via energy management systems (EMS) and sending reports of DR results. It is hoped that this technology will proliferate in the wake of the liberalization of power supply in Japan in 2016.

NEC Corp. brought their solution for handling surplus electrical power generated by photovoltaic power generation to CEATEC JAPAN 2015. The output from photovoltaic power generation can vary greatly and the dangers from oversupply are tangible. NEC Corp. have developed a technology that can estimate the potential output from various regions and spread this electrical power across the grid to enterprises in an attempt to balance output and consumption. Compared with the conventional manual approach, the technology from NEC Corp. succeeds in redistributing two-thirds more power, which means better power storage and the potential for improving the efficiency of power generation going forward.

Panasonic Corp. introduced its vision for a hydrogen energy based society at CEATEC JAPAN 2015. It is estimated that pure hydrogen fuel cells will become a major part of our domestic energy generation solution between 2020 and 2030, and research into how solar energy technologies can deliver more efficient hydrogen based power generation is making good progress.

Honda Motor Co., Ltd. has been drawing a lot of attention for its proposed technology known as Power Exporter 9000, which looks to use an automobile's fuel cell to supply power externally. This solution can provide 9kVA and the external supply is of sufficient stability and quality to power medical devices.



Tamura Corp. brought a host of new products currently under development to CEATEC, including their 2DM180506CM SiC-MOSFET gate driver module – a technology that is essential for the future of MOSFET and IGBT.

TDK Corp. has proposed a Wireless Power Consortium to promote key technologies required for wireless power supply systems for our electro-domestic appliances, tablets, smartphones, EVs, etc. Anritsu Corp. is proposing a measurement/estimation solution that could prove vital to the design and development of a wireless power supply system. This kQ software, developed in conjunction with the Toyohashi University of Technology, works with Anritsu Corp's vector network analyzer to help design the most efficient and effective transmission channels for wireless power supply.

Fly, utilize, discover – showcasing dronerelated technologies

This year drones (autonomous air vehicles, such as multicopters) have got a lot of coverage, but this is the first year that one of the leading companies in the development, manufacture and sale of drones, DJI, have exhibited at CEATEC. The company's full product lineup was on show, as well as a demonstration of stable flying capabilities within a caged area. DJI also took the opportunity to showcase ZENMUSEX5, which is the name for its threeaxis gimbal camera mounting system, featuring technology derived from the proliferation of drones. The video images from cameras mounted on the ZENMUSEX5 are very smooth and do not show any vibration or wobble.



The Cabinet Office of the Government of Japan had a booth in the NEXT Innovation Area where they introduced the technology that they will look to implement for the ongoing management, improvement and maintenance of infrastructure. The Cabinet Office of the Government of Japan demonstrated how drones and robots could be used to check the condition of paintwork on bridges at CEATEC JAPAN 2015.

Kozo Keikaku Engineering, Inc. have proposed a private network protocol for and by drones, what they call Drone de Relay, which would ensure constant live communication with a drone in the air. On the other hand, NEC Corp. proposed video-monitoring drone detection solution, which is capable of correctly identifying a small (30cm) drone that is flying 1km away against birds, or clouds, etc.

A great variety of technologies on show to support CPS/IoT

At CEATEC JAPAN 2015 the two things that stood out on the technology side were the sheer volume of products, proposals and devices related to Cyber Physical Systems (CPS) and the Internet of Things (IoT).

At CEATEC JAPAN 2015 Mitsubishi Electric Corp. demonstrated their three dimensional sensor that they refer to as Three Dimensional Model Reproduction Technology and when that sensor is mounted to a PC, it can capture a whole room and then that data can be used to accurately measure, recreate and model the room. So someone considering new furniture, home improvements, etc. simply use the model and its accurate measurements for reference.

The room used for the practical demonstration at CEATEC was quite small, but the system will work regardless of the size of the room in question, so this can be used to model office spaces, manufacturing plants and elevator shafts, etc. as well as providing information on clearance measurements for delivery bays, storage areas and other structures. This is an efficient tool for those looking to build, repurpose or renew a room or space.

Noah Inc. has developed the Hapimo: 3D, a 3D scanner that you use in the same way you would a regular digital camera. The subject is scanned from several different viewpoints and the device can generate sufficient 3D data to create a model.

XYZ Printing Japan Co., Ltd. was also exhibiting a simple, handy 3D scanner at CEATEC JAPAN 2015, called the XYZ Handheld 3D Scanner. This device fits in the palm of your hand and yet is capable of highly accurate full color 3D scans.

The goal of the CEATEC demo by KOA Corp. was to make the wind visible. KOA Corp's temperature sensors are used to measure temperature differentials (resistance) in wind, and this data can then be used to calculate wind pressure – a really simple yet elegant solution.

NEC Corp. took the opportunity afforded by CEATEC JAPAN 2015 to show off the world's first Crowd Behavioral Analysis Technology, which was created using video footage of the seemingly confused or random behavior of a crowd following an incident or disaster. NEC Corp. has successfully installed this technology in the Toshima Ward (Tokyo) General Disaster Prevention System and it is hoped that using this technology will provide emergency services with improved safety and better access to people in need during a disaster or crisis, particularly in places which are crowded by definition – event spaces, stations and airports.

Still in the field of behavioral analysis, InfoCube Inc. LAFLA was at CEATEC JAPAN 2015 to introduce GeoSTRATOS, which is a real time crowd flow analysis solution combining GPS with Beacon radio field strength. National Instruments Corp. came to CEATEC to demonstrate its device that aims to make sound sources visible, and the demos drew quite a crowd. This technology could have a host of different uses in isolating the cause of unwanted noise, knocking, etc. in manufacturing plants, production lines and cars, to name but a few.

The Tsuji Laboratory at Saitama University has developed a system capable of detecting and displaying the load on a human leg or arm in real time. There are many potential fields for this research, such as rehabilitation and sports science.

The NEXT Street area was set up to examine the potential social changes that will be triggered by CPS and IoT. Exhibiting at CEATEC for the first time was Rakuten Inc., specifically the Rakuten Institute of Technology, the company's research arm, who came along to introduce two systems. One was called HITOKE, which runs as an app on your smartphone. When your smartphone



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camera detects a product, HITOKE can automatically take you to the online shop for that product, where you can track its sales history and rank, as well as reading reviews of the product. The other was WallSHOP, whereby QR codes displayed on digital signage are read by your smartphone camera and this gives the smartphone user some control over what the signage displays. Users can also use WallSHOP to call up more detailed information about a product or service they are interested in.

The Fujitsu Co., Ltd. room at CEATEC JAPAN 2015 was completely digitized, with information sharing and free controls of the devices in the room by visitors. This is what Fujitsu refers to as UI Technology for the Digital Space. Attendees to a meeting can simply bring along their own PC, tablet and/or smartphone regardless of OS or vendor and connect securely. Projectors are networked to the system via the UI, as are all of the displays in the room. Movements and gestures can be used as commands to control what is shown on screen.

In addition to the Fujitsu Co., Ltd. room, the rest of the booth space introduced the company's cloud service Akisai, which has been created and designed to support the management of agricultural businesses. Akisai strives to make the value chain from seeding, cultivation, harvesting and distribution all visible, and is positioned to be a helpful ICT tool for farming communities.

Feeling what cannot be seen – haptics technology

At CEATEC JAPAN 2015 haptics technology was one area of major growth in terms of the demonstrations and exhibits. Haptics is a general term for any technology that gives the human user a buzz, shake or vibration in the form of feedback following interaction with something in the virtual realm.

Kyocera Corp. demonstrated how their driving system supports and encourages safety on the road. Touching the button shown on the display causes a mechanical "click" feedback from the demo device.

NLT Technologies Ltd. has developed a technology that can subtly control voltage so that the surface of a monitor gives a granular and/or bubbly feeling when touched. This display was an exhibit at CEATEC JAPAN 2015.

In the Venture and University Area, H2L Inc., the Tokyo University venture enterprise brought along their tactile controller called Unlimited Hand. This is attached to the user's arm and electrical impulses cause the user's hand muscles to contract. Most of the applications for this device are expected to be game-related.

The Hoshi Lab at the Nagoya Institute of Technology has developed a way for ultrasound waves to be concentrated on one specific point, which can cause tactile feedback in a space where the is nothing other than air.

The Haptics Research Center at Keio University brought their demo robot hand to CEATEC JAPAN 2015, in which the wearer is given feedback as if they were picking up potato chips. This was a very popular demonstration with CEATEC visitors.



Alps Electric Co., Ltd. came to CEATEC to demonstrate what they call their Haptic Trigger, which is a one-handed game controller. A sensor locates the position of all the fingers in the hand and an actuator feeds back kinesthetic sensations to the wearer's hand. This can cover touching something, feeling something hard, or when one's hand is being squeezed by something. Many visitors stopped by to try this controller and several were heard to cry out in surprise when the feedback started. This product appears to be quite close to completion.

Miraisens Inc. was the recipient of the CEATEC AWARD 2015 Review Panel's Special Prize. They named their technology the Three Tactile Senses, referring to the sense of force, pressure and touch, and developed various devices. These demonstrations garnered attention at the venue.

Cutting edge component technology supporting CPS and IoT

The leading electronic component manufacturers in Japan brought their new devices, sensors and wireless technologies to CEATEC JAPAN 2015, and there was a specific focus on components for CPS and IoT.

Of particular interest was Lazurite, the ultralight energy conservation micro-processor board developed by the Lapis Semiconductor Team at Rohm Group. Lazurite has been developed in conjunction with several venture capital companies. Lazurite Basic can run for long periods of time, consuming very little power. Products such as Lazurite Sub-GHz can operate in the 920MHz band for wireless communication modules, which makes it possible to combine with various different types of sensors and control components – making it easier to build IoT prototypes. The company is currently putting together a kit to make this prototyping process even easier and the demonstration at CEATEC was outstanding.

A collaboration between Rohm and Yukai Engineering Inc., resulted in the Karakuri Marching Band Robots, whereby small robots who each have their own unique movement patterns can locate each other using geomagnetic sensors and manage to arrange themselves into lines and also follow the instructions issued by the conductor to deliver a performance.

What really got the crowd excited at CEATEC JAPAN 2015 was the demonstration of Orizuru, a folded paper crane that can actually fly. Orizuru featured Lazurite Fly, the ultralight energy conservation micro-processor board that weighs only 31g, which allowed the paper crane to be remotely controlled in flight.



At the Kyocera Corp. booth, the MSS (Membrane-type Surface stress Sensor) was garnering a lot of attention as it was applied to an olfactory sensor. This technology is part of a wider effort to make things more 'visual' and one area where objective indices are perhaps lacking is odor judgment and this is an area where Kyocera has worked with partners such as the National Institute for Materials Science, Osaka University and NEC Corp. in what is known as the MSS Alliance to create a set of industry standards, and there are great hopes for what the MSS Alliance can deliver in the near future.

Unique electronic devices that support the future of Japanese manufacturing

At the Rohm Semiconductor Inc. booth at CEATEC JAPAN 2015, the company was exhibiting the BM92TxxMWV series electrical power supply controller IC, which can enable 100W of power to be supplied across a USB Type-C connector. USB connectors and ports can be found across a wide variety of electronic devices, and this series of IC controller can help do away with inconveniences such as differences in AC power supply voltage when traveling overseas by enabling a USB port to transfer data whilst connecting with 4 times the conventional USB power supply. Rohm Semiconductor also displayed the world's smallest 01005 size chip resistor and the world's smallest 0604 size transistor, both of which are ideal for the development of wearable devices.

Mitsumi Electric Co., Ltd. showed their Li-ion battery protection IC at CEATEC JAPAN 2015, which features an OTP memory to detect and adjust for excessive voltage. Conventionally, parameter settings are covered by laser trimming, but in this case these are written to the OTP memory, which means considerable savings in time and translates into faster development cycles. Companies such as Murata Manufacturing, Rohm Semiconductor, and TDK proposed unique high-precision sensors.

In this range of products, Mitsumi Electric Co., Ltd. also displayed the MMR931XA pressure sensor, which can resolve resolution readings as low as 2.0PA. The sensor itself can detect differences in elevation readings of mere 17cm, so it is literally capable of detecting the number of stair someone has walked up.

Kyocera Corp. exhibited a high temperature resistant DPF Soot Sensor Element for Particulate Filter at CEATEC that is capable of accurately detecting soot at temperatures of over 500C. This sensor does not use platinum, which is the conventional approach and promises great application for projects such as clean diesel.

Vitality sensors – a host of unique ideas

A number of different companies have come up with a variety of different sensors and devices designed to track data such as body temperature, pulse, etc. and these were on show at CEATEC JAPAN 2015.

Omron Corp. has a unique take on these sensors with their stick-on thermometer technology. This consists of a thermal flow sensor placed on top of two body temperature sensors and the device is capable of accurately measuring the core temperature of a human body. One small device can be applied to the body and gives a constantly updating and accurate measurement of body temperature.

Murata Manufacturing Co., Ltd. announced a contactless bed sensor at CEATEC JAPAN 2015. A unit was set up at the booth, complete with cardio sensors and accelerometers placed in the bed frame, which means the bed sensor, with no contact with the patient, can serve to monitor breathing rates and patterns as well as heartbeat, cardiac stroke volume, etc. – as demonstrated at CEATEC. This device can be sold as a sensor node when combined as a package with circuit modules and a wireless functionality.

Another unique proposal came from Mitsumi Electric Co., Ltd., who brought their concept 79GHz milliwave radar system to CEATEC. The aim is to estimate the time of day and weather conditions – say a night stroll, or walking in a storm - by measuring the difference in speed between the hand and the body of someone walking.

Driving assist and support systems developed with sensing and display technology

Several companies have projects that combine sensors with displays to create various devices designed to help drivers stay safe on the road.

Mazda Motor Corp. brought along an actual CX-5 SUV to CEATEC JAPAN 2015 and the vehicle was equipped with MAZDA PROACTIVE SAFETY technology, which senses and makes decisions related to vehicular control in accordance with the drivers understanding and awareness of what is happening around the vehicle. The ACTIVE DRIVING DISPLAY provides the driver with information as long as they are sitting in the correct posture for safe driving – and visitors to the Mazda Motor Corp. booth could experience this device first hand.



Kyocera Corp. also shared their vision of the future behind the wheel, with their so-called cockpit demonstration of their safe driving support technology, and many people waited patiently in line to experience the cockpit of the future.

Mitsumi Electric Co., Ltd. also displayed their driver cockpit of tomorrow by combining their technologies in milliwave radar, antennas, cameras and MEMS mrrors.

CEATEC JAPAN 2015 – Connecting to the Future

The final day of CEATEC JAPAN 2015 saw a great variety of different events aimed at students. The 27th All Japan Robot Sumo Competition in Kanto was held in Exhibition Hall 1. Exhibition Hall 4 was host to a Space Robot Contest open to all ages, from elementary school children through to graduate school students. The aim of these events was to bring out the passion for technology from the next generation. In recent years students are said to have been moving away from science, but the students on the final day of CEATEC JAPAN 2015 all showed great interest in the booths and CEATEC has hopefully planted the seeds of future innovation in a lot of young minds.

Many people came to CEATEC and visited booths, took in presentations and demonstrations and even experienced things firsthand, which means they hopefully left with a deeper interest and greater appreciation for the new ventures, businesses and markets that are being created through these technological innovations in the fields of IT and electronics.

Looking forward, the number of booths just seems to grow year on year, and the great variety and diversity of ideas and technology and sheer imagination goes some way to showing the potential for technology in the future.

Pick Up 2 CEATEC News

Introducing titles of CEATEC News from the official website. Loads of interesting and varied information.

2015.10.9

2015.10.9

2015.10.10

2015.10.10

Vol.001

CEATEC JAPAN 2015 Opening Press Conference

Vol.005



Develops Ultracompact Stick-on Body Temperature Measurement Technology

Vol.009

2015.10.10



2015.10.9

2015.10.9

Omron Healthcare

www.ceatec.com

Eager Crowd Queues at Seiko **Epson Booth to Try** the MOVERIO Smart Glass



Sharp presents the "RoBoHoN" robot mobile phone

Vol.006



Panasonic Corp. demonstrates a premium audio system, the OTTAVA SC-C500 – on sale Spring 2016

Vol.010



Sharp Corp. unveils a Curved Free-Form Display (FFD) capable of circular design, having holes

2015.10.10

Vol.003



BOE Japan presents 110-inch 8K compatible, and 10K compatible displays as reference exhibit

Vol.007



Murata Manufacturing Demonstrates Household **Appliance Control** with Smart Glass

2015.10.10 Vol.011



CEATEC JAPAN 2015 Opening Reception

Vol.004

2015.10.9



Reference Exhibit: The Power Exporter 9000. An external electricity supply inverter by Honda Motor Co., Ltd.



Vol.008

XYZ Printing Japan Shows 3D Printers Not Yet Released on the Japanese Market

Vol.012



"wena wrist" — The smart band commercialization aim of a young 25-year old Sony leader paving the way for the next generation

2015.10.13

NEXT — Today's Dreams, Future Realities



26

Keynote Speeches / Guest Speeches / Special session / Next-Innovation Session

10/7 (wea.)		
Keynote Speech		
К-01 13:30-14:15	Our future life and society supported by the Cyber Physical System - smart sensing, smart communications - SHARP CORPORATION Director, Chairman SHIGEAKI MIZUSHIMA, Ph.D.	
Keynote Speech		1200 A 100 - 2 4 5 8 4
К-02 14:30-15:15	"Orchestrating a brighter world" NEC Corporation President (Representative Director) Nobuhiro Endo	N/A
Keynote Speech		
K-03 15:30-16:15	The Future of the Information Technology Industry in Internet of Things World	
Com	puter Software Association Japan Chairman(President, Mamezou Holdings Co., Ltd.) Norio Ogiwara	
Guest Speech		AND DESCRIPTION
G-01 10:30-11:15 The Tokyo Organising C	Making the 2020 Tokyo Olympics & Paralympics the Best in History ommittee of the Olympic and Paralympic Games Senior Executive Board Member / Vice Director General Hiroshi SATO	
Guest Speech		
G-02 11:30-12:15	Dreaming of Space, Moving toward the Future Astronaut Naoko Yamazaki	
10/8 (Thu.)		
Special Session		
SP2-11 10:00-11:00	Open IoT:Live with it or die	
Spacial Sossion	Professor of the ${\sf Un}$ Director of YRP Ubiquitous Networking Laboratory ${\sf D}$	niversity of Tokyo Dr. Ken Sakamura
Special Session	Professor of the Un Director of YRP Ubiquitous Networking Laboratory D	niversity of Tokyo Dr. Ken Sakamura
Special SessionSP2-0110:00-11:00Special Session	Professor of the Un Director of YRP Ubiquitous Networking Laboratory D Ministry of Internal Affairs and C	niversity of Tokyo Dr. Ken Sakamura Communications
Special Session SP2-01 10:00-11:00 Special Session SP2-02 14:00-17:20	Professor of the Un Director of YRP Ubiquitous Networking Laboratory D Ministry of Internal Affairs and C	niversity of Tokyo Dr. Ken Sakamura Communications
Special SessionSP2-0110:00-11:00Special SessionSP2-0214:00-17:30Welcome Address	Professor of the Un Director of YRP Ubiquitous Networking Laboratory	niversity of Tokyo Dr. Ken Sakamura Communications 5G) -2015
Special SessionSP2-0110:00-11:00Special SessionSP2-0214:00-17:30Welcome Address	Professor of the Un Director of YRP Ubiquitous Networking Laboratory D Ministry of Internal Affairs and C International Workshop on the Fifth Mobile Communications Systems (5 Ministry of Internal Affairs and C International Telecommunication Union Radiocommunication Bureau Study Gr	Diversity of Tokyo Dr. Ken Sakamura Communications 5G) -2015 Communications
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The Fifth Genatration Mobile Communications Promotion Forum (Japan)

Next-Innovation Session

NEXT2-11 11:15-12:15 **Car of the Future**

Magna International Chief Technology Officer Swamy Kotagiri

10/9 (Fri.))				
Next-In	novation So	ession			
NEXT3-11	10:30-12:30	The 44th Tokyo Motor Show 20	15 Cooperative S	ymposium	
• Japane	se National R	&D Program for Automated Driving Sy	/stem		
-Cross-ı	ministerial St	rategic Innovation promotion Program	n(SIP)-		
			Cabinet Office	Deputy Director General for Sci	Fizo Matsumoto
Automa	ated Driving	in Continental			
	5			Continental Au	Itomotive Corporation
			Directo	r, Systems & Technology Memb	keiii Toyoda
• A sinale	1-TFLOPS A	utomotive Processor realize AI on the	Car and		Keiji loyoda
Low-Sp	eed Autonor	nous Driving		NVIE	DIA Senior Solutions Architect
					Toru Baji
Next-In	novation So	ession			
NEXT3-13	15:30-17:00	Building for IoT – Introducing B	luetooth Develo	per Studio	
					Bluetooth SIG, inc.
					Application Developer Program Technical Program Managerr
					Vincent Gao
Novt-In	novation S	ossion			
	16.00 17.00	The dream of a cure for cancer i	is realized with a	dvances in Acceler	ator technology
NEATS-04	10:00-17:00	The dream of a cure for cancer	is realized with a		
			NECST BU	ISINESS HEADQUARTERS , OPE	RATING OFFICER CHIEF ENGINEER
					Katsuhiko Furuya
Next-In	novation So	ession			
NEXT3-01	10:00-12:30	Smart House Market in Japan a	nd Overseas		
		Ministry of Economy	, Trade and Industry	y Commerce and Info	ormation Policy Bureau
			Direc	tor Information Economy Divis	ion Mr. Kyuichiro Sano
				The	ECHONET Consortium
		Vice Chair ISCA Smart House /	Ruilding Standardiz	executive Managing Direct	romotion Study Group
		Professor, De	partment of Home Electroni	ics, Kanagawa Institute of Tech	nology Dr. Masao Isshiki
		Moderator			
			uilding Standardiz	Vice C	hair, JSCA Smart House/
		l	sulfulling standardiz	Keio Universit	Mr. Masaki Umejima
Novt In	ovation S	occion			,
	12 00 14 20	Panel Discussion by the representati	ves of ANIA CSAL 14	SDA HET	
NEX13-02	13:00-14:30	Consider Information Technolo	gy policies and s	oftware industry in	the future
		The Role and Common Issues o	f IT-related Organ	nizations	
		Moderator	5	The Nikkei Editorial	Board Waichi Sekiguchi
		Panelist		Computer Softv	vare Association Japan
				(President, Mamezou Holding:	Co., Ltd.) Norio Ogiwara
			All Nippon Informa	Chair	man Wataru Hasegawa
			Japan	Information Engineer	ring Trade Center(JIET)
				5	President Masami Sakai
				JApan Software Pa Cha	rty Association(JASPA)
Next-In	novat <u>ion S</u>	ession			
NEXT3-03	14:45-15:45	Lights and shadows in the conr	nected world		
		- Darkness of security eroding h	oright future of lo	oT -	
		······································	Pricewaterho	ouseCoopers Co., Ltd	. / Threat Research Lab

Partner Yuji Hoshizawa +

Exhibitor Attributes

Fyhihit Stage	No	No. of		
Exhibit Stage	Domestic	Overseas	total	Booths
Lifestyle & Society Stage	108	52	160	645
Key Technologies Stage	91	80	171	526
NEXT Innovation Area	181	19	200	438
Total	380	151	531	1,609

Venue Structure

Number Breakdown of Overseas Exhibitors (151 exhibitors from 19 countries/regions)

Region	No. of Countries & Regions / Exhibitors	Breakdown		
Asia	8 / 109	China: 47, Taiwan: 32, Korea: 18, Hong Kong: 5, Malaysia: 3, Philippines: 2, 1 each from Indonesia and Singapore		
Europe	9/15	Germany: 5, Switzerland: 2, Belgium: 2 1 each from England, France, Hungary Italy, Poland and Sweden		
N. America	1 / 26	USA: 26		
Pan-Pacific	1/1	Australia: 1		



Exhibitor Questionnaire

	Exhibition Objectives								
	75.4%	Appeal r	Appeal new products and technologies						
	66.9%	Comprehe	Comprehensive PR and brand appeal of the company/organization						
	65.3%	Develop	Develop new clients in the domestic market						
	61.9%	Gather r	Gather responses and comments from visitors						
	56.8%	Sales pro	Sales promotion of products and technologies						
	27.1%	Closer ti	Closer ties with clients						
	21.2%	Bus iness	contra	ct					
	19.5%	Develop	new cli	ients from	the glob	al market			
	19.5%	Improve	employ	/ee aware	ness and	stimulate	the comp	any	
	18.6%	Appeal a	Appeal advantages against competitors						
	2.5%	Others		1	I		1	1	
0	10	20	30	40	50	60	70	80	

Overall Satisfaction



Impression of CEATEC JAPAN

Comprehensive exhibition representing Japan in the cutting-edge field of IT & electronics Comprehensive exhibition that is useful for information distribution with media linkage Comprehensive exhibition that fosters new lifestyles and business styles of the future Comprehensive exhibition that is suitable for introducing the world leading electronic parts and devices Comprehensive exhibition that creates closer ties among exhibitors, and between visitors and exhibitors Comprehensive exhibition that distributes and allows you to acquire latest technological trends, products, and solutions Comprehensive exhibition that is useful for future marketing, sales and orders. Comprehensive exhibition that is suitable for develop new products and technologies from comments acquired during the show Comprehensive exhibition that is suitable for developing new business channels

	I think so	Not sure	I don't thir	nk so		
		88.1%			6.39	% 5.6%
		78.6%			15.1%	6.3%
		77.8%			16.7%	5.6%
		75.4%			18.3%	6.3%
		66.7%		19.8%	Ď	13.5%
		82.9%			8.9%	6.5%
	58.	.7%		31.0%		10.3%
		69.8%		23	8.0%	7.1%
		67.5%	1	21.4	%	11.1%
0	20	40	60	8	0	100 (%)

Number of Visitors

October	7 th (Wed)	8 th (Thu)	9 th (Fri)	10 th (Sat)	Total
Registered visitors	24,553	27,168	36,949	22,105	110,775
Registered visitors from overseas	656	595	480	344	2,075
Registered press	1,025	240	198	79	1,542
Exhibit related	5,379	4,811	4,479	3,987	18,656
Total	31,613	32,814	42,106	26,515	133,048

Visitor Attributes

Industry Type

15.3%	Electronics, information and communication manufacturer/section
10.8%	Electronic device manufacturer/Section
3.3%	Automotive/transport machinery manufacturer
0.8%	Medical machinery manufacturer
6.0%	General/precision machinery manufacturer
7.6%	Other manufacturing
5.1%	Software developer and system integrator
2.6%	Communications service provider
1.5%	Internet service/web content creator
2.7%	Broadcasting/video content
2.2%	Information processing/information service
1.7%	Investigation/consulting
6.0%	IT business-exporting, trading, distribution and sales
0.7%	Energy
1.5%	Finance/securities/insurance
2.6%	Publication/advertisement/printing
1.8%	Construction/real estate
4.5%	Other service
3.9%	Government office/organization, school/research institute
5	5 10 15 20(%)

Occupation

10.5%	Management/general affairs/accounting
2.1%	Consulting
1.7%	Purchasing/materials/buyer
17.5%	R & D
1.7%	System management/maintenance
11.7%	Engineering/design/creative
1.8%	Manufacturing/production/inspection
0.7%	Information processing/operation
9.9%	Investigation/planning/marketing
1.0%	Public relations/advertisement
19.0%	Accounts/sales
5.7%	Other occupation
8.3%	General
8.4%	Stydent
0	5 10 15 20(%)



Visitor Questionnaire (Results from visitors' after-show questionnaire)



How much were you satisfied with CEATEC JAPAN 2015?



Will you visit the next CEATEC JAPAN?



Vour involvement to purchasing and introducing IT-related products and services

	28.5%	Responsible for gathering information for reviewing before purchase							
	27.5%	Asked for my comments and instructions on purchasing							
	14.3%	Have the pow	Have the power to make a purchasing decision						
	29.7%	Others							
0	5	10	15	20	25	30 (%)			

Annual budget for purchasing IT-related products and services

	14.5%	Less than 2.5 million-yen						
	8.3%	Between 5 and 10 million-yen						
	6.4%	Between 2.5 and 5 million-yen						
	4.8%	Between 10 and 25 million-yen						
	4.8%	Between 100 million and 1 billion-yen						
	2.9%	Between 25 and 50 million-yen						
	2.8%	Between 75 and 100 million-yen						
	2.1%	More than 1 billion-yen						
	1.0%	Between 50 and 75 million-yen						
	29.1%	Not involved in budget						
	23.2%	Others						
0	5	10 15 20 25 30(%)						

■ Your role in the development of in-house products

32.1%	Asked for co	mments and	d instruction	s on product	developme	nt
24.2%	Gathering information for reviewing related to product development					
13.5%	Decide on	the produ	ct develop	ment polic	y	
30.2%	Others					I.
5	10	15	20	25	30	35 (%)

Details on visitation objectives (1)

	46.0%	A part	of the work			
	39.0%	Both v	vork and perso			
	15.0%	Persor	nal interests			
0		10	20	30	40	50 (%)

Details on visitation objectives (2) [for multiple answers]

80.0%	Acquire latest information on products and/or technologies								
73.4%	Identify industrial trends								
48.5%	General	interest	S						
17.2%	Gather competitors' information								
8.2%	Develop business channels								
8.3%	Interact and strengthen relationship with clients								
7.9%	Research prior to purchase/introduction								
4.4%	Others		1		-		1		
10	20	30	40	50	60	70	80 (%)		



Public Relations/Promotions

(1) CEATEC JAPAN 2015 Press Releases

- ① 1/28 Call for exhibitors to CEATEC JAPAN 2015
- ② 7/28 Exhibition outline decided: Online pre-registration and seat reservation for conferences begin today
- ③ 9/17 Notice for Opening Press Conference/Media Convention to be held on Oct. 6 (Tue)
- ④ 10/6 Show starts on Oct. 7 (Wed) at Makuhari Messe
- (5) 10/7 CEATEC AWARD 2015 winners of Ministerial Awards selected
- (6) 10/8 CEATEC AWARD 2015 category awards selected
- 10/9 Winners of CEATEC INNOVATION AWARDS, "As Selected by US Journalists" at CEATEC JAPAN 2015 selected
- ⑧ 10/10 CEATEC JAPAN 2015 closes

(2) Press Releases for Overseas (in English)

- ① 1/28 Exhibitor Applications Now Open for CEATEC JAPAN 2015
- ② 7/28 On-line pre-registration starting today Official website also accepting seat reservations
- ③ 9/17 Invitation to Press Conference and Media Convention Held on Tuesday, October 6, 2015
- (4) 10/6 CEATEC JAPAN 2015 Opens on October 7 (Wed.) at Makuhari Messe
- ⑤ 10/8 Winners of CEATEC AWARD 2015 Grand Prix and Semi-Grand Prix for Individual Categories Have Been Chosen

(6) Aired Broadcasts

In Japan: 5hours 14 minutes 39 seconds

Overseas: **15**hours **7**minutes **34**seconds

(Excerpt from major broadcasts made between Oct 2015 and Jan 2016)

Worldwide*: BBC WC	ORLD (E	BST)	*Including Asia (Japan)			
BBC World News "Live"	1	0/7	« 1'10 »			
"Click" (CEATEC 2015 ①)	1	0/10	≪ 13'05 ≫× 2			
"Click" (CEATEC 2015 ①) (reru	un) 1	0/11	≪ 13'05 ≫× 2			
"Click" (CEATEC 2015 (2))	1	0/24	≪ 3'01 ≫× 2			
"Click" (CEATEC 2015 (2) (reru	un) 1	0/25	≪ 3'01 ≫× 2			
Worldwide*: NHK WORL	_D/jitv (Japan	International Broadcasting Television) (JST)			
Newsline	10/6、7	≪ 3'4	0 »× 3			
 USA: KTLA-5 (Los Ang 	geles) N	letwo	rk (PST)			
Good Day LA 10/8		« 3'45 (Live) »				
Good Day LA	10/9	« 2'5) x 3 ≫ × 45			
Good Day LA	10/12	≪ 2'3	4 x 3 » × 45			
USA: BBC WORLD (BS)	T)					
"Click" (CEATEC 2015 ①) (reru	un) 1	0/13	≪ 13'05 ≫			
"Click" (CEATEC 2015 (2) (reru	un) 1	0/27	≪ 3'01 ≫			
USA: Local stations – :	Steven	Gree	nberg Show (individual local time)			
Good Morning Texas	10/13	≪ 0'1	6 »			
New Day Northwest	10/15	≪ 0'4	5 ≫			
Pan-Europe: Euronew	rs (CET)					
Sci-tech, high-tech	10/13 ~	- 17 🔌	<4'00 ≫× 19			
Pan-Europe and Afric	a: Fran	ce 24	(CET)			
TECH 24#	10/10 ~	- 17 🔇	< 5'26 ≫ × 3			
• Europe: France 5 (CET)					
"Le magazine de la santé" CE/	ATEC 201	5 (1)	11/3 <pre>« 7'00 »× 1</pre>			
"Le magazine de la santé" CEATEC 2		5 (2)	11/12 《 7'00 》× 2			
Europe (France): LCI (CET)					
Plein Ecran – CEATEC 2015 ①) 10/1	1~15	≪ 9'57 ≫× 6			
Plein Ecran – CEATEC 2015 @) 10/1	8~22	≪ 10'40 ≫ × 6			
• Europe (Germany): N2	24 (CET	.)				
Nachrichten	10/22	≪ 0'5	7 »× 4			
• Europe (UK): BBC (BS	Γ)					
Click - CEATEC 2015 (1)	10/10 ~	- 12 👒	< 13'05 »× 10			
Click - CEATEC 2015 (2)	10/24 ~	- 26 👒	< 3'01 ≫× 10			
Middle-East: BBC Pers	sian TV	(BST)				
Farsi Click - CEATEC 2015	10/16 ~	- 22 《	< 11'46 ≫× 7			
Asia: Phoenix Televisi	on (HK	T)				
Trendy Guide – CEATEC 2015	(1) 10/2	2、23	≪ 15'03 ≫× 3			
Trendy Guide – CEATEC 2015	(2) 10/2	3、24	≪ 13'05 ≫× 3			

(6) 10/9 The Winners of CEATEC JAPAN 2015 Innovation Awards "As Selected by U.S. Journalists"

(3) Exhibitor Press Releases

(Posted on CEATEC JAPAN 2015 Official Website) Japanese:**25**

English: 9

(4) Registered Press Member

Total: **1,542** (116 from overseas)

(5) Online News Insertion In Japan: **2,260** Overseas: **3,308**

(7) Media Partners

The IT and electronics industries were given a boost with the cooperation of related industry magazines and Web media. Furthermore, through mutual cooperation, the show was also able to appeal to new visitor groups of specific business types and occupations.



(8) CEATEC JAPAN Official Mail Magazine

A total of 17 mails including $\overline{5}$ HTML mails were sent to a total of 200-thousand recipients from past visitors and new registered visitors.

(9) CEATEC News

There were 103 articles distributed on highly topical subjects such as CEATEC JAPAN highlights and exhibitor information.

(10) Production of PR Tools (in print)

- 1) DM Invitation (in Japanese/English) and envelope were produced and widely distributed to exhibitors, sponsor organizations, related organizations and media.
- Conference Program/Venue map (in Japanese/English) were produced and distributed to all visitors during the exhibition.

CEATEC JAPAN Official Website

Information has been conveyed through the official website in real time throughout the year. We have consolidated press releases, necessary items and information, and added functions for booking conference attendance and visitor registration for the show.

The site is viewed by a great number of visitors as many valuable information including updated exhibitor highlights, CEATEC News articles, exhibitor press releases, and various event news were efficiently provided to a wide-variety of audiences.

PV

3,872,359

(between Jul 1 and Oct 31, 2015)

Sessions*

852,221

(between Jul 1 and Oct 31, 2015)

*A "session" refers to the series of actions from a user visiting, connecting and logging into the website, looking at information, and then departing and logging off. Sessions are closed when browsers are closed or there is no response for a certain period of time. Sessions are also called visits.

CEATEC News Article Insertion

Articles in Japanese: 103 Articles in English: 24

Video Distribution

Posted videos of CEATEC AWARD recipient products/services on YouTube to strengthen information distribution throughout the world

No. of video: **21**

Links to CEATEC JAPAN 2015 Special Sites

No. of links: 28

Total no. of clicks: **12,837**

(between Jul 1 and Oct 31, 2015)

Exhibitors' CEATEC JAPAN 2015 special sites are introduced in the official website. Each of such special sites helps to promote efficient dissemination of information, and generate a synergetic effect.

Social Networking

CEATEC JAPAN Official Facebook account

No. of Likes: **6,814*** (107% over last year)

*as of December 18, 2015

CEATEC JAPAN Official Twitter account

No. of followers: **3, 124*** (105% over last year) *as of December 18, 2015





Exhibit Outline

Name

CEATEC JAPAN 2015

(Combined Exhibition of Advanced Technologies)

Objectives

A place for the state-of-the-art

By aiming for the further development of lifestyles, societies, economies and culture through broad use of information communications technology (ICT), and by providing a venue where people can experience the latest technologies, products, systems and software under one roof, the show will help to aim for the growth of IT & electronics industries.

Hailing from Japan & Asia

As the largest disseminator of information on IT and electronics in Asia, CEATEC JAPAN provides the world with information on their latest achievements and trends and globally promotes technical excellence in these fields.

Convergence

Convergence aims for growth and revolution in lifestyles and society through merging of a wide range of industries such as mobility, energy, and health care with the IT and electronics industries, and promotes contribution to society and the further development of industries by uniting related businesses and posing questions to society.

Duration

October 7th (Wed.) – 10th (Sat.), 2015, 10:00 a.m. - 5:00 p.m.

Location Makuhari Messe 2-1 Nakase, Mihama-ku, Chiba, Japan

Admission

All visitors are required to register

- ▶ Visitor registering at the Gate: General admission JPY1,000, Students JPY500
- (Groups of 20 or more students and children under 12 years of age are admitted free-of-charge.)
- Online pre-registration / Invitational registration at the gate: Free admission
- Free Admission Day: October 10th (Registration required for visitors over 18 years of age)

Sponsor

CEATEC JAPAN Executive Board

- Japan Electronics and Information Technology Industries Association (JEITA)
- Communications and Information network Association of Japan (CIAJ)
- Computer Software Association of Japan (CSAJ)

Support

- Ministry of Internal Affairs and Communications, Japan (MIC), Ministry of Foreign Affairs of Japan (MOFA), Ministry of Health, Labour and Welfare (MHLW), Ministry of Economy, Trade and Industry, Japan (METI), Ministry of Land, Infrastructure, Transport and Tourism
- Listed by date established.)*Expected
 Japan External Trade Organization (JETRO), New Energy and Industrial Technology Development Organization (NEDO), National Institute of Advanced Industrial Science and Technology (AIST), National Institute of Information and Communications Technology (NICT), Information-technology Promotion Agency, Japan (IPA), Organization for Small & Medium Enterprises and Regional Innovation, JAPAN, Japan National Tourist Organization (JNTO)
- Chiba Prefectural Government, Chiba Municipal Government
- NHK, The National Association of Commercial Broadcasters in Japan (NAB)
- Nippon Keidanren, The Japan Chamber of Commerce and Industry (JCCI), The Tokyo Chamber of Commerce and Industry, The Chiba Chamber of Commerce and Industry
- U.S. Commercial Service JAPAN, Delegation of the European Union to Japan, British Embassy in Japan, Canadian Embassy and Consulates in Japan Business France, Embassy of France in Japan

(No particular order)

Assistance Organizations

- Telecommunications Carriers Association (TCA), The Telecommunications Association (TTA), Internet Association Japan (IAjapan), The Telecommunication Technology Committee (TTC), JAPAN INSTITUTE FOR PROMOTION OF DIGITAL ECONOMY AND COMMUNITY (JIPDEC), IT Verification Industry Association (IVIA), Association for Computer Skills Promotion (ACSP)
- Association of Radio Industries and Businesses (ARIB), Radio Engineering & Electronics Association (REEA), Japan Satellite Broadcasting Association (JSBA), Japan Cable and Telecommunications Association (JCTA), Japan Cable Television Engineering Association (JCTEA)
- Association of Consumer Electronics Marketing in Japan, Electrical Products Association of Japan, Japan Federation of Electronic Parts Distributors & Dealers (JEP), Japan Computer System Seller Association (JCSSA)

- ▶ The Japan Electrical Manufacturers' Association (JEMA), Japan Business Machine and Information System Industries Association (JBMIA), Japan Audio Society (JAS), Japan Ássociation of Medical Devices Industries (Jamdi), Japan Electric Measuring Instruments Manufacturers' Association (JEMIMA), Nippon Electric Control Equipment Industries Association (NECA), Camera & Imaging Products Association (CIPA), Japan Embedded Systems Technology Association (JASA), Japan
- Electronics Packaging Circuits Association (JPCA)
 Japan Automobile Manufacturers Association, Inc. (JAMA), ITS Japan, Japan Auto Parts Industries Association (JAPIA)
- The Faderation of Electric Power Companies of Japan, New Energy Foundation (NEF), The Energy Conservation Center, Japan (EECJ), The Japan Electric Association (EJA), The Battery Association of Japan (BAJ), Japan Photovoltaic Energy Association (JPEA), Japan Wind Power Association (JWPA), Solar System Development Association (SSDA), Japan Smart Community Álliance (JSCA)
- Japan Federation of Housing Organizations (Judanren), The Japan Machinery Federation (JMF), Japan Robot Association (JARA), The Japan Refrigeration and Air Conditioning Industry Association (JRAIA). Digital Content Association of Japan (DCAj), Japan Video Software
- Association (JVA), Japan Book Publishers Association (JBPA), Recording Industry Association of Japan (RIAJ) (No particular order)

 Assistance Academic Societies
 The Institute of Image Information and Television Engineers (ITE), The Japan Society of Applied Physics (JSAP), The Institute of Image Electronics Engineers of Japan (I.I.E.E.J.), Information Processing Society of Japan (IPSJ), The Institute of Electrical Engineers of Japan, The Institute of Electronics, Information and Communication Engineers (IEICE) (No particular order)

Global Partners

- Consumer Technology Association (CTA) / International CES (USA)
 Messe Berlin / IFA (Germany)
- Messe München International / electronica (Germany) , electronica & Productronica China (China) ▶ Hanover Fairs / CeBIT (Germany)

- Asia Partners China Council for the Promotion of International Trade,
 - Electronics & Information Industry Sub-Council (CCPIT ECC) China Electronic Chamber of Commerce (CECC)
 - China International Software & Information Service Center (CiSiS) The Hong Kong Electronic Industries Association (HKEIA)

 - Taiwan External Trade Development Council (TAITRA)

(Alphabetical order) Asia Electronics Exhibition Cooperate Conference (AEECC Member*)

- China Electronic Appliance Corporation (CEAC)
- Hong Kong Trade Development Council (HKTDC)
- Korea Electronics Association (KEA) Þ
- Taiwan Electrical and Electronic Manufacturers' Association (TEEMA) Þ
- * The Asia Electronics Exhibition Cooperate Conference (AEECC) was established in 1997 to encourage mutual promotional cooperation activities among major electronics and IT exhibition organizers in the Asia region.

(Alphabetical order)

(No particular order)

Management

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