Panasonic to Showcase Its Solutions for "A Better Life, A Better World" at CEATEC JAPAN 2017

Osaka, Japan - Panasonic Corporation, a company striving to realize "A Better Life, A Better World" by solving societal issues and responding to the diverse needs of its customers through Internet of Things (IoT), artificial intelligence (AI), and other cutting-edge technologies, will present its latest technologies and solutions at CEATEC JAPAN 2017, an annual exhibition of CPS (cyber-physical systems) and IoT to be held from October 3 to 6, 2017 at Makuhari Messe, Chiba City, on the outskirts of Tokyo.

Under the key concept of "co-creation" with customers and society, the Panasonic booth will consist of three exhibition areas: Smart Life Experience, Smart Connected Solution, and Technology. The Open Innovation Lab will also seek to create open innovation through dialog with visitors, such as through panel discussions and technology seminars.

Main Exhibits

Smart Life Experience: Bringing New User Experiences (UX) to Lifestyles

• Smart aging care system (stage)
Panasonic will introduce its vision of integrated community care systems for the future that work in collaboration with communities to watch independent lifestyles of senior citizens.

• Resyone X
This is a concept of an IoT-based futuristic robot, which adds vital sign sensors to the Resyone Plus announced January this year, an electric bed-wheelchair combo robot designed to help the user get out of bed and move on one’s own.

• Smart home care support system
Panasonic has started a pilot of this IoT-based remote monitoring service for elderly people at home through air conditioners, sensors and network cameras installed in the house. Panasonic proposes this service as a pillar to support the integrated community care systems the company envisions that, in cooperation with communities, enable people to receive care services in the comfort of their home until the last days of their life.

• "I" (micro) wireless charging
This wireless charging technology makes it possible to simultaneously charge and provide communications to devices by using an RFID protocol. This technology enables maintenance-free data collection from large numbers of sensors placed over a wide area or sensors with batteries that are difficult to replace or recharged via a cable.

• "cocotto" social robot for young children
This spherical social robot is designed to help infants build their senses by moving, talking and connecting.

• Wearable maker patch
Panasonic proposes a new concept with this pliable patch device that allows for easily adding electronic functions to clothes or fabric products. By simply sewing this patch on clothing, ordinary clothing can be turned into a wearable device, for example, to indicate location information and measure amount of activity, temperature and humidity.

• CaloRieco calorie/ nutrition checker
Using Panasonic’s unique analyzing method, CaloRieco makes dietary management easier. Just put in CaloRieco a plate of meal as it is - without crushing or cutting into pieces - before you eat, then this device estimates calories and three major
The Shibuya Experimental 1) Tuesday, Event open The Open Co-creation

These emotions, using scanning technology. This solution will help train beauticians at beauty schools, as well as helping sales persons at cosmetic counters to provide makeup advice to customers.

**Smart Connected Solution: New Solution Created by Connecting Devices**

- **IoT services for B2B**
  Panasonic will launch a new IoT service for the B2B sector which connects advanced core technologies such as image recognition and IoT cybersecurity technologies on the cloud.

- **IoT Key Technology: "HD-PLC" Power Line Communication**
  This is a technology for the IoT, enabling high-speed communications via power lines or existing metal lines. The multi-hop technology vastly enhances connectivity, extends communications ranges, and increases the number of connecting devices.

**Technology: Cutting-edge Technologies and Devices**

- **Living body radar using microwave**
  This bioradar is an application of wireless communications technology to identify people's locations and actions.

- **Remote vital monitoring system using millimeter-wave radar**
  The sensor can read the heart beats and their intervals of several people simultaneously from a remote place in a contactless way.

- **3D LiDAR sensor**
  The sensor can measure distance and direction of a target with a wide angle of view using Panasonic’s original laser scanning technology.

- **Emotion and physical condition sensing**
  Using two types of cameras and Panasonic’s image processing technology, this sensing technology can detect a person's emotions, drowsiness and sense of being hot or cold in a contactless manner.

- **Small rechargeable batteries for IoT/wearable devices**
  These batteries are suitable to various types of IoT or wearable devices.

**Co-creation Area**

**Open Innovation Lab: Dialog for co-creation**

The Open Innovation Lab, set up inside the booth, will hold panel discussions, seminars and so forth. The aim is to create open innovation together via dialog with visitors.

**Event schedule**

**Tuesday, October 3**

1) 11:00 - 11:45 a.m. (45 minutes)

**Experimental district for next 100 years - Shibuya 100BANCH [Seminar]**

Shibuya 100BANCH, which opened in July 2017, offers a view of an enriched future lifestyle 100 years from now. Some of the 100 different projects in the experimental zone will be demonstrated.
2) 1:00 - 1:45 p.m. (45 minutes)
**Wearable maker patch application ideas contest [Idea contest]**
In collaboration between Digital Hollywood University and Panasonic, a youth idea contest for wearable manufacturer patches is now under way and the final judging and announcement of the results will take place at the venue, with QUANTUM joining as a guest.

3) 2:00 - 2:45 p.m. (45 minutes)
**Childcare x robotics-Raising children in 2020 [Panel discussion]**
Under the theme of raising children and robots, this panel discussion will focus on future robots interacting with children, inviting robot developers and educationists as panelists.

4) 3:00 - 3:45 p.m. (45 minutes)
**The potential of CaloRieco introduced by a distinguished athlete [Talk session]**
Tatsuya Fukuzawa, a member of the Panasonic Panthers volleyball team, joins as a guest in a talk session looking at dietary habits and the potential of CaloRieco.

**Wednesday, October 4**

5) 11:00 - 11:45 a.m. (45 minutes)
**Cybersecurity in the IoT era [Seminar]**
This seminar will introduce Panasonic’s IoT security services designed for B2B, focusing on cybersecurity.

6) 1:00 - 1:45 p.m. (45 minutes)
**Digital innovation for makeup [Interactive demonstration]**
The makeup artist Mi-co will give demonstrations to show the attractive features of Panasonic’s Makeup Design Tool, a digital tool letting you try out makeup easily as if you were applying makeup just as usual.

7) 2:00 - 2:45 p.m. (45 minutes)
**Monitoring the safety of elderly people living alone using the IoT [Seminar]**
The seminar will introduce an on-going pilot program of an IoT-based remote care support system that monitors elderly people living alone from afar using air conditioners, sensors and network cameras installed in the house.

8) 3:00 - 3:45 p.m. (45 minutes)
**The uses and extended applications of the Resyone Plus robotic device for nursing care [Talk session]**
Staff at facilities that have adopted the Resyone electric bed-wheelchair combo robot will talk about why they decided to use this device, how they use it and what its benefits are.

**Thursday, October 5**

9) 11:00 - 11:30 a.m. (30 minutes)
**Determining location and actions via microwaves [Seminar]**
Professor Naoki Homma of Iwate University, a collaborative partner of Panasonic, will explain the technology in plain language, together with videos and other aids.

10) 1:00 - 1:45 p.m. (45 minutes)
**Estimation of pulse intervals using millimeter waves [Seminar]**
Professor Toru Sato of Kyoto University, a collaborative partner of Panasonic, will explain in simple terms a technology using ultra-wideband Doppler radar that can measure heart beats as accurately as electrocardiographs.

11) 2:00 - 2:45 p.m. (45 minutes)
**HD-PLC for buildings, towns and factories [Talk session]**
Companies that are using high-definition power line communications (HD-PLC) in their products and systems will talk about HD-PLC’s benefits and how it has helped solve difficulties in their business.
Technologies for Li-ion batteries explained by developers as perfect solutions for small devices [Seminar]
Panasonic's developers will talk about the technology for pin-type and flexible-type lithium-ion batteries, along with products using this technology.

Friday, October 6

A collaboration to combine cutting-edge robotics technology and next-generation electric-powered wheelchairs [Seminar]
The seminar will feature a test run of the Whill Next, a collaboration of a next-generation electric-powered wheelchair Whill Inc. is developing and Panasonic's core robotics technology.

Concierge service using food life logs - IoT x boxed meal deliveries [Lab discussion]
A discussion on a concierge service focused on nutrition will look at how to utilize food logs, inviting AIVICK, Panasonic’s partner in carrying out a pilot program on this subject, as a guest panelist. More details are available at: http://gccatapult.panasonic.com/en/bento/

Incentive services using health action data - Wellness Tech x insurance [Lab discussion]
A discussion will focus on how to use health action data collected from electronics devices, inviting FiNC, Panasonic’s partner in a pilot program on this subject, as a guest.

New experience in living space enabled by images - AMP (Ambient Media Player) [Lab discussion]
AMP proposes a new style of interior that enhances time and space with images and sound. This session introduces Panasonic’s AMP and discusses its future development.

Please note that the above schedule and themes may change without prior notice.

Panasonic Booth at CEATEC JAPAN 2017

- Dates: October 3 to 6, 2017 (10:00 a.m. - 5:00 p.m.)
- Venue: Makuhari Messe (International Exhibition Hall), 2-1 Nakase, Mihama-ku, Chiba Booth: Hall 1, Community Area

Organizer’s official website: http://www.ceatec.com/en/

- Information on Panasonic exhibits in the organizer’s official website:

- Panasonic LIVE@CEATEC
  Excitement of the show floor and information on the latest products and technologies at the Panasonic booth will be viewed at the following website:

- Information on major exhibitions Panasonic participates
About Panasonic

Panasonic Corporation is a worldwide leader in the development of diverse electronics technologies and solutions for customers in the consumer electronics, housing, automotive, and B2B businesses. Celebrating its 100th anniversary in 2018, the company has expanded globally and now operates 495 subsidiaries and 91 associated companies worldwide, recording consolidated net sales of 7.343 trillion yen for the year ended March 31, 2017. Committed to pursuing new value through innovation across divisional lines, the company uses its technologies to create a better life and a better world for its customers. To learn more about Panasonic:

http://www.panasonic.com/global

Media Contact:

Global Communications Department

Panasonic Corporation
Tel: +81-(0)3-3574-5664

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