Wi-SUN Wide-Area Large-Scale IoT Webinar in China

Vertexcom co-hosts with Wi-SUN Alliance and its members to promote the application of Wi-SUN FAN certification in smart meters and smart street lighting

HSINCHU, HSINCHU COUNTY, TAIWAN, April 1, 2020 /EINPresswire.com/ -- Vertexcom, a world-class fabless semiconductor company delivering smart grid and IoT communication solutions, co-hosts with Wi-SUN alliance, Shanghai Institute of Microsystem and Information Technology (SIMIT), Lierda, LEHEINFO (LIT), Itron and Allion Labs to hold the "Wi-SUN Wide Area Large-scale IoT Forum " by using the live broadcasting platform of Global Meter, the professional meter media on March 31. The Wi-SUN webinar presents the technical verification, application cases and the development of Wi-SUN FAN certification in smart meters, smart streetlight, and utilities. It has received over 5 thousand online viewings.

Vertexcom co-hosts with Wi-SUN Alliance and its members to promote the application of Wi-SUN FAN certification in smart meters and smart street lighting

Wi-SUN is a member of the wide range large scale IoT that has attracted much attention in recent years. With its technical advantages, it has been widely used in communication devices such as smart meters and home energy management system (HEMS). This webinar is jointly organized by Wi-SUN Alliance and its members and Global Meter, the professional meter media in China. The participating members include technical experts (Wi-SUN alliance and SIMIT), chip design company (Vertexcom), module maker (Lierda), smart meter (LIT) and smart street lighting(Itron), certification laboratory (Allion Labs), etc., showing that Wi-SUN Alliance has a complete ecosystem.

The webinar was opened by Phil Beecher, the president and CEO of Wi-SUN Alliance. Wi-SUN

Alliance was established in 2012. Currently, it has more than 250 members, including Cisco, ARM, TI, Itron and Vertexcom, and has jointly launched more than 150 Wi-SUN certified products. Wi-SUN Alliance members have deployed more than 95 million Wi-SUN-enabled devices worldwide. The mission of Wi-SUN Alliance is to use the open standard IEEE 802.15.4g to provide strong product connectivity through testing and certification programs, develop the Wi-SUN ecosystem, and realize the interoperability of smart city and smart utility communication network.

Then followed by Sum Chin Sean, Certified Project Manager of Wi-SUN Alliance, introduce Wi-SUN FAN (Field Area Network) certification. Sum pointed out that the certification is mainly for facilities in large-scale fields, such as smart grid and smart street lighting. Wi-SUN FAN network provides a communications infrastructure that allows utilities to connect to the same field network and achieve interoperability. In addition, the certification uses the global wireless communication standards, IEEE 802.15.4g ™ and IETF IPv6 protocols, to achieve stable, high-performance, low-power and long-distance network.

Dr. Ming-Tuo Zhou of SIMIT delivered a special lecture on "Low Power Wide Area Network(LPWAN) Technology Comparison within Wi-SUN, LoRaWAN, and NB-IoT " from the perspective of wireless transmission technology. In his summary, Dr. Zhou pointed out that the main advantages of Wi-SUN FAN include support for multi-hop, mesh network connection, strong self-healing ability, robust network, strong scalability, and the network can cover a distance of several kilometers, the highest supported data rate, currently 300bps, which can be greater than 1Mbps in the future, the strongest low-power consumption and the longest battery life, the largest MAC packet, the most complete protocol stack, and the best IPv6 support, working in unlicensed bands, can establish a private network and save maintenance costs.

Jeffrey Zhong, the vice president of Vertexcom stated that Vertexcom is the first Wi-SUN SoC and network software design company, and the first company has three Wi-SUN FAN certifications which is necessary for Wi-SUN FAN certified product shipment, including FAN PHY, FAN Router, and FAN Border Router. Vertexcom can realize long-distance transmission and thousand-point automatic networking based on Wi-SUN FAN network, also can interconnect with other Wi-SUN FAN certified devices, assist customers' communication modules, smart gateways, and end-product quickly acquire Wi-SUN FAN certification and timely to the market.

Zhang YuLong, the marketing manager of Lierda, introduced that Lierda has launched the Wi-SUN RF module, WS7300 series, which complies with ISM frequency band around the world. WS7300-915 is a small SMT Wi-SUN module with an external antenna, equipped with a Wi-SUN chip, VC7300, from Vertexcom. The maximum data rate can reach 400kbps and its Sub-GHz band is compiled for all frequency bands around the world, the maximum transmission power is 20dbm. It built-in AES256 hardware encryption which has high security. It solves the problems of signal loss and congestion, noise interference, short distance, shielding, battery life shortage and so on.

In the application case of Wi-SUN, LIT and Itron respectively gave keynote speeches on "Smart Meter AMI Solutions" and "Smart Street Lighting Application Cases". LIT introduced the integrated solution of Wi-SUN communication products. Its network planning simulation software can simulate the shielding and interference of wireless signals caused by the terrain, location, and height of the installation site of the electricity meter, and simulate the distribution of nodes and multi-hop in the mesh network to execute the statistics and analysis of network density, signal, and blind spot. Itron demonstrated the world ’s largest Wi-SUN network smart street light project in Miami, USA, which includes 500,000 street light controllers and 5 million

smart meters and components in the smart grid.

At the end of the webinar, Allion Labs made a special speech on the Wi-SUN FAN certification process. Allion Labs pointed out that the scope of Wi-SUN FAN certification includes Physical (PHY), Data Link (DL), Network (NW) and Transport (TP) layers, while the Application layer is out of scope of Wi-SUN certification program. Wi-SUN FAN certified products must pass compatibility tests, so as to ensure that all devices can be interconnected and work together safely.

Global meter points out that according to the leading research companies, the worldwide shipments of IEEE 802.15.4 modules are expected to triple to 1 billion in the next five years. IPv6 protocol has the fastest growth rate. With end-to-end IP addressable capabilities, wide-coverage, security, and scalability, Wi-SUN is rapidly emerging in infrastructure devices of utility network and smart city.

About Vertexcom Technologies
Vertexcom Technologies, is a long range, large scale, auto network of IoT and smart grid communication chip and networking software design company. It provides low-cost Wi-SUN, PLC and integrated dual-mode communication solutions. www.vertexcom.com

About the Wi-SUN Alliance
Wi-SUN Alliance was established in 2012 and is a global non-profit organization. The vision of Wi-SUN Alliance is based on the mesh network protocol IEEE 802.15.4g specifications, providing strong product connectivity through testing and certification programs, developing Wi-SUN ecosystem, and achieving the interoperability of communication networks in smart cities and smart utilities. https://www.wi-sun.org/

CONTACT:
info@vertexcom.com
+886-3-5601431

Karvino LU
Vertexcom Technologies
+886 3-5601431
email us here
