Plat'Home Releases OpenBlocks® IoT BX1G Ultra-Compact Microserver for

M2M/IoT System Architecture

IoT Connectivity for Every Thing

TOKYO--On September 15, 2015 leading micro server manufacturer Plat'Home Co., Ltd. (TOKYO6836) announced the release of OpenBlocks® IoT BX1G. OpenBlocks® IoT BX1G is a micro server specially designed for IoT (Internet of Things) architecture.

Plat'Home's OpenBlocks® series of compact Linux micro servers have been adopted by major carriers, electronic surveillance networks, sensor networks and other enterprises in the internet telecommunications field. Ultra-compact OpenBlocks® computer appliances now permeate the industry with over 80,000 units sold to date.   In recent years use of these micro servers as gateway devices for various sensor and M2M/IoT networks has become increasingly widespread.

The newly released OpenBlocks® IoT BX1G boasts the same exceptional reliability, flexibility and computing performance as previous units in the OpenBlocks® series. In addition, new wired and wireless interfaces allow it to connect with a wider variety of sensors making it ideal for use as a M2M/IoT gateway.

Additionally, OpenBlocks® IoT BX1G is only 8 percent in size (by volume) than previously released OpenBlocks® (OpenBlocks® AX3) products. This allows it to be installed in extremely small spaces where such devices were previously not thought possible. As a result, the OpenBlocks® IoT BX1G will make new uses possible and help to usher in the IoT era.

An IoT Gateway with On-Board 3G, Wi-Fi and Bluetooth, that is able to Collect, Process and Transmit Data from a Variety of Sensors

When implementing IoT (Internet of Things) systems a variety of sensors—monitoring items such as atmospheric temperature, air pressure, electricity, light, blood pressure or body temperature—must be connected to a network to communicate with the cloud, data center or other host system. A gateway converts different interfaces and protocols and allow these sensors to connect to the network.

Product image

Because of the great variety of interfaces used by sensors, utilizing a single gateway to connect all sensors has traditionally been difficult. The large size of the gateways has also posed problems for design layout, while spec and OS limitations have prevented free implementation of applications. Because of these issues the selection and installation of gateways has involved significant trouble and cost when constructing IoT systems.

OpenBlocks® IoT BX1G, however, helps solve these issues through the following advantages:

- Ultra-compact form factor
  At just 41.6 mm (W) x 96mm (D) x 11.3mm (H), the OpenBlocks® IoT BX1G can be installed in nearly any location or environment and does not pose hurdles for design layout.

- Equipped with a variety of wired and wireless interfaces
  The OpenBlocks® IoT BX1G is equipped with wireless communication capabilities including Wi-Fi and Bluetooth, and can also connect to wired interfaces, such as RS-485, RS-232C, GPIO and Ethernet, using optional cables.

- On-Board 3G (W-CDMA) Communication Module
  The ultra-compact casing includes an on-board 3G Communication module that allows it to connect to host networks from nearly any location.

- Powerful CPU and Extensive Memory
  The OpenBlocks® IoT BX1G is equipped with an Intel SoC processor based on 22nm process technology, 1GB of RAM and 4GB of Flash ROM. This gives it the computing performance demanded by IoT edge side devices.

- Equipped with Linux Complete Package for Easy Implementation of Applications
  The micro server's general-purpose Debian GNU/Linux OS makes implementation of a variety of applications easy. Eliminating the difficulty of implementation allows for faster construction of IoT systems.

Uses
  - As an IoT gateway to mediate between various sensors and host networks
  - As a fog computing node to provide edge-side computing power
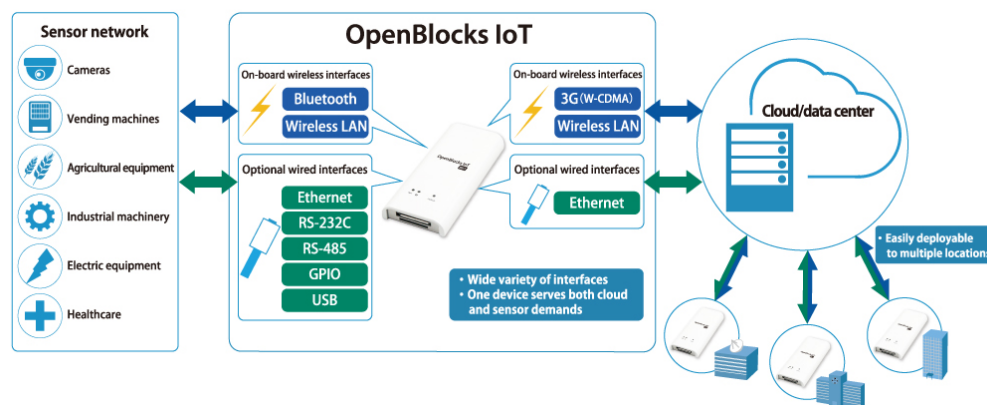 - As an M2M/IoT router to connect multiple sensors via internet

Illustration of IoT Gateway Uses

Pricing/Specs

- Price

  Product Name: OpenBlocks® IoT BX1G

  Product Number: OBSBX1G

  Suggested price: Open price

- Specification

  CPU : Intel® Atom™ Processor 500MHz (dual-core)

  Main Memory: 1GB (LPDDR3)

  Flash ROM: 4GB (eMMC)

  Internal interface:

  　3G(W-CDMA) *1

  　Bluetooth 4.0

  　Wi-Fi (IEEE802.11a/b/g/n)

  External Interface:

  　USB 2.0（Type-A）Cable

  Case size: 41.6mm(W)　x 96mm(D)x 11.3mm(H) (a excluding protrusions)

  Certification: FCC class-B ・ NRTL ・ IC ・ CE ・ VCCI class-B ・ JATE/TELEC

  Power Supply　: DC 5V

  OS　:Debian GNU/Linux

*1 3G(UMTS/HSPA+: Five band 800/850/900/1900/2100MHz) / 2G(GSM/GPRS/EDGE: Quad band 850/900/1800/1900MHz)

Quote from Intel Corporation

"Plat'Home has developed a unique, ultra-compact sized Edison-based IoT Gateway and Edge Node Computer connecting various sensors, beacons and devices to Cloud. This product continues and expands Plat'Home's impressive track record in Linux Server manufacturing and we are looking forward to working closely with Plat'Home in providing easily configurable, manageable and scalable IoT solutions to customers in Japan and worldwide."

　　　Jonathan Ballon

　　　Vice President, Internet of Things Group General Manager,

　　　Markets and Channels Acceleration Division

　　　Intel Corporation.

Product website

https://www.plathome.com/en/bx1g/

About Plat'Home

Plat'Home is a major developer and manufacturer of micro servers. Founded in 1993 as a pioneer in Linux servers, Plat'Home provides its own brand of computing devices for the communications and networking fields. OpenBlocks®, Plat'Home's line of ultra-compact Linux servers that fit in the palm of the hand, have been adopted by a wide range of enterprises that support infrastructure in Japan, including in logistics, transport, finance, the energy industry and public agencies. OpenBlocks® has recently garnered significant attention in the burgeoning fields of M2M and IoT (Internet of Things).

https://www.plathome.com/en/about/

Contacts

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