The explosion of the Internet of Things (IoT) market in the previous years has evidently started to change the way we live and work. The combination of increasingly connected devices, cloud economics, and dispatch of big data analytics are what conveys this new reality. Industry experts foresee that the technology and computing industry will be centered in an IoT world through which self-configuring devices will be connected to billions of other devices and enabled through intelligent entities which query each other and create intelligent information and services.

Today, Advantech recognizes that the notable shift to the IoT era is creating various groundbreaking opportunities for companies. These include establishing new services, bettering real-time decision making, increasing productivity, overcoming demanding obstacles, and expanding new and innovative user experiences.

Advantech understands that intelligent systems need enhanced connectivity, security, and manageability and requires not only hardware performance improvements, but also new silicon design, software integration, and new user interfaces. By working closely and developing strong ecosystem partnerships with silicon vendors, software providers and system integrators, Advantech can drive this vision and direction towards the IoT era. Advantech’s stated mission of “Enabling an Intelligent Planet” openly welcomes the Internet of Things age and reaches towards the vision of a ubiquitous network which can connect anyone, anything, anytime, anyhow, and anywhere through innovative smart technologies.

With over 30 years of technological know-how across diverse sectors, combined with its full design and manufacturing infrastructure, Advantech provides embedded computing solutions designed specifically for IoT applications.
Advantech is continuously developing and delivering cutting edge boards and systems with proven high performance, reliability, longevity and excellent design quality for IoT applications.

**Advantech’s IoT Products:**

**UTX-3115**
- The new fanless UTX-3115 system is a powerful miniature industrial-grade solution that features extended temperature operation and a 5-year long life cycle with strict revision control. The unit is an Intel® Intelligent Systems Framework (Intel® ISF) ready solution perfect as an IoT gateway/edge device as well as a M2M communication device.
  - The IoT Gateway
  - Intel Intelligent Systems Framework (ISF) ready
  - -20~60°C rugged design

**UBC-200**
- UBC-200 is an ARM-based compact and high performance solution powered by the Freescale ARM® Cortex™-A9 i.MX6 dual/quad core high performance processor with metal chassis, DIN rail and wall-mount support, fanless design, 9 ~ 24V wide range power input, and multiple I/O options. UBC-200 is a stable, efficient solution that is able to operate 24/7 and is targeted at IoT cloud-based services and solutions.
  - Freescale i.mx6 IoT solution
  - Support WIFI or 3G module for data communication
  - -20~70°C rugged design

**MIO-5251**
- MIO-5251 is the latest 3.5” single board computer based on the latest Intel Celeron J1900/ATOM E3825. Along with Advantech’s innovative MIO design concept (simple thermal design, unified mounting hole, easy I/O expansion via off-the-shelf MIOe module), MIO-5251 features dual Gigabit Ethernet and 3 independent display support (48bit LVDS, HDMI/DP and VGA) making it ideal for rapid system solution designs even in harsh environments.
  - Intel® Atom™ E3845/E3825 Celeron® J1900 SoC
  - Advantech MIO Extension Bus for I/O expansions
  - 5.75” x 4”; 0 to 60°C (operation)

**SOM-7567**
- SOM-7567 embedded COM solution consists of CPU, memory and flash story in a tiny 84mm x 55 mm module. It adopts Intel latest Atom processor which provides 2X+ computing performance and 5X+ 3D graphic performance than previous generations. With its strong performance, low power consumption and minuscule size, SOM-7567 is ideal for markets such as factory automation, portable device, in-vehicle equipment and instrumentation.
  - Intel® Atom™ E3800 Family/Celeron® N2920/J1900 SoC
  - Onboard 4GB DDR3L memory; flash up to 64GB (MLC)
  - 3.3” x 2.17”; 0 to 60°C (operation)
In the past, customers contacted Advantech mainly for single boards or chassis/system products; however, in the ever-growing Intelligent Systems and IoT era, customers need an even more integration embedded solution that can better support their applications and make their products well-equipped for the market. SUSIAccess, Advantech’s unique remote device management software, is designed to build intelligence into embedded devices, transforming them to “intelligent systems.” It constantly monitors the health of multiple devices and sends out alarm notifications via e-mails and SMS message if abnormal conditions exist. SUSIAccess also provides other powerful utilities such as system recovery (powered by Acronis), system protection (powered by McAfee) and remote KVM to protect and recover faulty systems.

The next generation SUSIAccess will feature Cloud-based Protection, Seamless Interconnection, and 3D Map-view Device Management, making it easier to manage intelligent systems through mobile devices, anytime, anywhere, on any device!

**Embedded M2M/IoT Module Integration Services**

Embracing IoT Frameworks in Smarter Cities

Today’s embedded devices have the ability to communicate, transforming simple dedicated devices into “Interconnected Smart Devices.” In the Internet of Things (IoT) era, where wireless connectivity is everywhere, intelligent systems require more and more storage and memory. Already, many kinds of I/O sensors for smart city applications are creating more convenient, efficient and safer urban environments, but IoT applications are getting complicated due to the need for smarter, faster and more accurate intelligent systems. In response to this trend, Advantech provides embedded M2M/IoT module integration services in order to minimize the workload of system integrators.

Advantech provides complete hardware modules and platforms from data acquisition/transmission, computing, peripherals and decision I/O in order to help domain users design intelligent systems using our extensive resources. Customers can focus on their smart applications with minimal system integration effort. Our one-stop integration services are fully compatible with all Advantech’s product lines, and provide all the components customers need for building an intelligent system.
The knowledge database is the most important part of an intelligent system. Advantech provides Computer on Modules (COM), Single Board Computers (SBC), Industrial Motherboards (IMB) and Embedded Box PC (EBC) for all kinds of applications. Peripherals are always the main bottle neck of these devices, so we designed multiple embedded module product lines such as Wireless, NAND Flash, Industrial Memory and I/O interface card with fully tested compatibility guarantees so that system integrators can rely on our one-stop service to get their intelligent systems up and running quickly.

**High Compatibility, High Performance and High Reliability Peripheral Modules**

From data capture, communication network, intelligent computing and decision I/O, the integrating module services enable System Integrators (SIs) to embrace IoT frameworks in Smart City applications with minimum efforts, rapid schedule and maximum benefits. Advantech defines its brand mission as “Enabling an Intelligent Planet,” and we provide integrated products and services to empower innovative technologies and solutions in the IoT era.

**One-stop Service from Data, and Information to Decisions**