

[About Us](#) | [Products](#) | [Solutions](#) | [Support](#) | [Contact Us](#)

LITE-ON Storage is now Solid State Storage Technology Corporation

# The Internet of Things: Connecting Tomorrow



# What Is the Internet of Things?

The Internet of Things (IoT) refers to a network of objects, or “things,” that exist to gather and exchange data

with other devices or systems via the Internet. A “thing” could be a sensor, a “smart” device, or even a smartphone. Sensors gather data at the network edge for help with things like real-time analytics and consumption metrics. Smart devices range from home security systems to appliances to multimedia devices. Smartphones and similar wireless technologies can help track people and their data for medical purposes, among other things. Together, these devices can gather information and communicate to improve response time and assist in duties that cannot be handled in a strictly centralized manner. This includes the ability to act autonomously when needed.

## Where Is IoT Utilized?

IoT is utilized in a number of areas including the home, industrial applications, artificial intelligence (AI) and machine learning (ML), automation, embedded systems, automobiles, drones, and more. Many homes now have “smart” appliances, such as refrigerators that can keep track of inventory, along with cameras and security systems with remote monitoring. IoT also provides sensors for the energy industry, climatology for environmental monitoring, and other areas where a fast response time is critical. IoT sees a lot of use in healthcare especially but also in agriculture and maritime. And of course, there are many uses for military operations including in distant locations. Finally, such devices can offer feedback for training and assistance with AI and ML for improved efficiency.

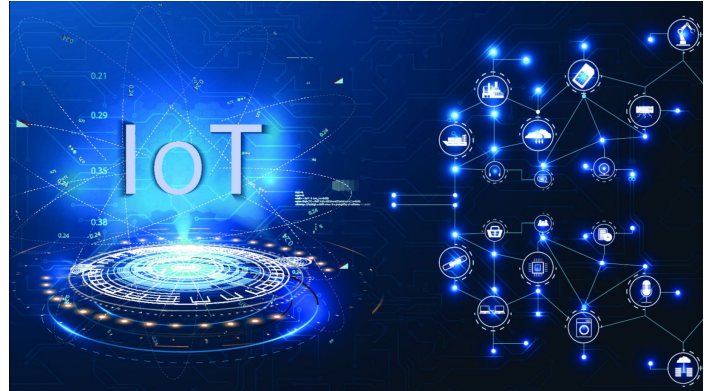
## IoT Advantages and Disadvantages

Like any other technological trend, IoT has both advantages and disadvantages. As already mentioned, IoT is useful for cases requiring quick, local response time, and also for remote monitoring in general. The ability to place and track sensors – including ones on the edge that can also do compute, as in real-time analytics – means that interoperability and built-in intelligence can reduce maintenance and the need for a “basket of remotes.” However, competing standards can reduce the ability for devices to cooperate and the lack of personnel training can impact planning and management especially for larger projects. Lastly, there

are issues with privacy and security as well as government regulations for addressability – differing and changing wireless and wired standards, for example.

## Storage for IoT

When dealing with IoT devices, storage is an important concept with often distinct requirements. Typically, these devices are small so form factor is a primary concern – short M.2 or slim serial ATA (SATA) is ideal. Storage must have high durability and reliability which includes protection for shock, vibration, and temperature, along with the ability to operate in confined spaces. Reduced power consumption is ideal which can often mean optimizing storage capacity for a specific use.



The storage must also support security standards such as encryption (AES), authentication (including pre-boot, or PBA), and protection of data-at-rest. Regardless of platform, deployment must be simple with remote accessibility for maintenance and troubleshooting.

## Summary

The Internet of Things has a lot to offer for home users, commercial enterprises, and industrial applications. Connectivity and intelligence together make for better data and a more convenient experience – this means improved performance at the edge. Although there are some concerns with security, privacy, and government regulations, standards are always improving and the integration of manifold devices continues unabated. The market will continue to grow and with it the need for storage appropriate for such devices – and at the heart of that storage, flash-based drives. Solid State Storage Technology Corp. is excited to be on

the cutting-edge of such technology to help make for a more connected world, one device at a time.

\*All product and company names may be trademarks or registered trademarks of their respective holders.

## Our SSD Solutions



### **PCIe™** - Our ED1

Series is a powerful, high performance SSD made for edge storage applications. It comes in M.2 and U.2 form factors.



### **SATA** - Our ER2 SSD

Series delivers affordability and performance with superior random read/write speeds of up to 90,000/45,000 IOPS. It comes in M.2 and 2.5" form factors.

Please contact our [Solid State Storage Technology Corp. expert](#) for more information.

\*Specifications and features are subject to change without prior notice. Images are samples only, not actual products.



# ABOUT US

A subsidiary of KIOXIA Corporation, **Solid State Storage Technology Corporation** is a global leader in the design, development, and manufacturing of digital storage solutions. We offer a comprehensive lineup of high-performance customizable SSDs for the Enterprise, Industrial, and Business Client markets. With various form factors and interfaces, our SSD solutions help businesses simplify their storage infrastructures accelerating variable workloads, improving efficiency, and reducing total cost of ownership.

© 2021 Solid State Storage Technology Corporation. All rights reserved.

**Learn more at [www.ssstc.com](http://www.ssstc.com)**

Created with  **mailchimp**