Technology. Designed.

The foundation and future of IoT is built on collaboration between industry professionals across the globe, paving the way to a world of seamless interaction that is transforming the way we live, work and play. Our members are at the top of their technical fields and are fueled by the expertise needed to unlock its potential.

Access Control

Today, smart access control solutions for home and business are fragmented with various proprietary solutions. Card or token-based access control for commercial or business facilities can be difficult to use and manage, lacking the consistent user experience and cross-platform interoperability that would allow for easier credential management, simpler controls and expanded adoption beyond large enterprises.

To promote an access control ecosystem, a standardized solution is needed. The Access Control Working Group is defining, developing, and delivering a comprehensive direct/point-to-point access control application layer for door locks, readers, mobile devices, and related services for commercial building enterprise and home use.

Product Security

As attacks against IoT systems continue to grow, requirements are materializing, from governmental standards and regulations to emerging national certification and labeling programs. Keeping up with these diverging requirements will be challenging and may lead to high costs and complexity.

A standardized approach will help assure the security of IoT products while removing the burden of adherence to multiple requirements. With broad participation, the Product Security Working Group is developing a product security certification program looking across these varied regulations and establishing a global, harmonized approach. Product Security Certification grants a mark recognized by regulators and consumers as a seal confirming the product meets these security requirements.

Building the foundation & future of the IoT

Matter

Matter is the foundation for connected things. This industry-unifying standard has a promise of reliable, secure connectivity—a seal of approval that devices will work seamlessly together, today and tomorrow. Matter is creating more connections between more objects, simplifying development for manufacturers and increasing compatibility for consumers.

Simplicity
Easy to purchase and use

Interoperability
Devices from multiple brands work natively together

Reliability
Consistent and responsive local connectivity

Security
Robust and streamlined for developers and users

Zigbee

Zigbee is the full-stack solution for all smart devices. It’s the most widely adopted and complete IoT solution—from mesh network to the universal language that allows smart objects to work together.

Globally Adopted
Extensive library of applications and devices deployed by hundreds of companies around the world

Interoperable
Large ecosystem of products to choose from that work seamlessly together

Reliable and Low-Power
Proven, self-healing mesh network eliminates single points of failure with minimal power consumption

Secure
Secure by design with a variety of security mechanisms including over-the-air AES-128-CCM encryption

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Since 2002 the Connectivity Standards Alliance has been dedicated to simplifying the complex, creating an open path to IoT adoption and innovation, and promoting universal open standards, enabling all objects to securely connect and interact.

We are a multi-standards organization, focused on building an inclusive community, enabling market growth for the industry, and accelerating value delivery to members, customers and consumers.

Collaborative Community

The Connectivity Standards Alliance guides the IoT forward by simplifying and harmonizing technology standards across the industry. By fostering unprecedented collaboration, we are building a better, more connected world together.

We bring together global competitors and partners alike from across the value chain, to work side-by-side and create better outcomes through a collaborative culture and community.

We provide our members with the infrastructure and processes for consensus-driven standards with actionable outcomes. By using our standards and assets, developers can focus more energy on creating the most innovative, usable, and accessible IoT products.

Over 5,200 member representatives from nearly 600 global member companies collaborate to develop open, global standards for the Internet of Things (IoT), certify products to help ensure interoperability, and promote use of our standards around the world.

Testing & Certification

Protecting investments. Spreading development. Building trust in the market. The Alliance offers certification programs demonstrating things work as specified. This helps members avoid costly, fragmented development cycles and protects customers’ and consumers’ investments by ensuring device interoperability.

Programs
- End Product and Platform Certification
- Certification by Similarity, to support product variants
- Certification Transfer Program

History of Our Technology Expansion

<table>
<thead>
<tr>
<th>Year</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Zigbee, created on IEEE 802.15.4 using the 2.4GHz band and a self-healing true mesh network, standardized.</td>
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<tr>
<td>2008</td>
<td>Zigbee 3.0, Zigbee PRO, Zigbee Green Power, Zigbee R23, new features for Zigbee Pro along with Zigbee Direct and SubGHz solutions.</td>
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<td>2012</td>
<td>Green Power, enabling wireless devices to be powered utilizing energy-harvesting methods with limited or no batteries.</td>
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<tr>
<td>2014</td>
<td>JupiterMesh, Robust, low-power industrial IoT wireless mesh network with flexible data rates.</td>
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<tr>
<td>2016</td>
<td>Smart Energy, Standard for interoperable products that monitor, control, inform, and automate the delivery and use of energy and water.</td>
</tr>
<tr>
<td>2019</td>
<td>Zigbee R23, New features for Zigbee Pro along with Zigbee Direct and SubGHz solutions.</td>
</tr>
<tr>
<td>2022+</td>
<td>dotdot, Common language for smart objects, so they can speak to each other effortlessly on any network.</td>
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Commitment to Diversity

As a global organization supporting the inclusion of diverse perspectives and experiences, we seek opportunities, such as working with the World Economic Forum to strengthen global collaboration, to enhance this commitment. We welcome all voices and contributions to make the IoT more open, equitable, and accessible.

Become a Member

Join the Connectivity Standards Alliance today and work with the world’s most innovative companies to build a better, more connected world together.

Learn more at www.csa-iot.org.