THREAD GROUP
2024
Annual Report

Smarter homes. Smarter buildings.

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On behalf of Thread Group, I sincerely thank all our members for your invaluable contributions, which played a crucial role in reaching last year's milestones. In July of 2024, Thread celebrated its 10th anniversary. Since then, we have experienced steady growth in Thread Group membership and the certification of products and components.

Our current membership stands at over 200 members, representing an 18% year-over-year increase. The number of products and components that support technology is a crucial metric in standard organizations. We would like to welcome all member companies who have joined Thread Group since our last Members Meeting in Porto in October 2024.

I am pleased to announce that we now have over 670 certifications and over 300 products available in the market today. Notably, 58% of our members have launched products, with a strong pipeline of additional products set to enter the market in 2025 and beyond. I eagerly anticipate a future where Thread will become a ubiquitous technology in homes, commercial IoT markets, and other verticals.

During the first year of Matter-over-Thread products, we received extensive feedback and responses on Thread's initial deployment. I am immensely proud of the collaborative efforts of our members in identifying and resolving some of the challenges and gaps in the specifications. These enhancements have introduced innovative functionality essential for Thread's reliability, performance, and comprehensive feature set. The Thread Group formally released its Thread 1.4 specification for implementation in September 2024 and opened its accompanying certification program for applications. This release enables members to introduce powerful improvements to new and existing wireless IoT devices, as well as advanced sensor networks that utilize Thread to establish secure and private mesh networks.

The Thread 1.4 update allows device manufacturers to implement features like credential sharing, enhanced Internet connectivity, Thread over infrastructure, network diagnostics, and secure commissioning at scale, along with numerous enhancements to overall robustness and scalability. For further information, please refer to the Thread 1.4 blog and the Thread 1.4 Features white paper.

Last year, we established an interoperability lab in Albuquerque, New Mexico, and have since collaborated with Connectivity Standards Alliance's (CSA) interoperability laboratory. The primary objective of this laboratory was to facilitate the testing of Thread member companies' products for interoperability with other Thread devices and ecosystems. This is crucial to Thread's success, as we expect end-users to use products from multiple ecosystems and manufacturers.

The Thread Border Router functionality, an essential requirement for enabling Thread in households, is being widely deployed. We have observed growing usage, with over 75% of households now having a product that supports the border router functionality. This year, we will enhance our customer education and awareness through campaigns about Thread Border Routers, highlighting the expanding household adoption and the growing range of ecosystem products supporting them.

Our objective is to make Thread as ubiquitous as Wi-Fi, where end users no longer need to think about Thread infrastructure. Instead, they can rely on a set of already available devices in their homes that support the functionality and all their key use cases. We will also continue our collaboration with the CSA to enhance market education about Matter controllers supporting Thread.

So far in 2025, Thread Group attended the Consumer Electronics Show (CES) in January, where we engaged with the media, participated in panel discussions, and met with potential member companies that could benefit from the widespread adoption of Thread technology. We also had attendance at ISH, Mobile World Congress, and Embedded World 2025, where numerous companies showcased their Matter-over-Thread products.

Thread Group made major advancements in 2024, and we are so proud of how far we've come. We look forward to reaching even more product milestones and the continuing growth of our membership in 2025. Onward and upward, thanks to the help of our members.

2024 Highlights

In 2014, seven organizations joined forces as the Thread Group with a vision to solve the market and technical challenges inherent to the Internet of Things. What has evolved is a universal approach to seamless, reliable, low-power, and secure wireless connectivity for devices in smart homes and buildings globally.

In the last decade, we saw collaboration among organizations of all sizes, from around the world and across all facets of IoT. This was only possible because Thread members understand the importance of solving real-world problems in IoT and the greater good our work brings to the industry. The Group's commitment to the long game is thanks to everyone's patience, dedication, flexibility for consensus building, and mutual respect.

Here's to ten years of driving connectivity and to a future of smarter, more convenient and sustainable living and working environments ahead!

THREAD 1.4

SPECIFICATION RELEASE & CERTIFICATION PROGRAM

Credential Sharing

Ubiquitous Internet Connectivity

Thread Over Infrastructure

Network Diagnostics

Secure Commissioning at Scale

Robustness and Scalability

For more details, read our Thread 1.4 blog **here**.

Congratulations to
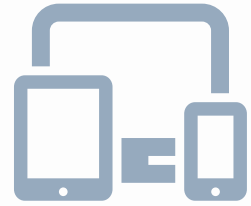
mado   **NABU CASA**   **ATOUCH · WINWEL**

Thread Group's **Innovation Enabler Award Program** recognizes IoT start-ups and provides innovative companies with the opportunity to join the Thread Group and play a role in defining the connected home through access to Thread technology.

The program provides up to two promising companies with a complimentary two-year Thread Group membership to enable them to engage with the community and build new products using Thread. Winners are selected twice a year.
For more information, visit the Thread Group website.

2024 Snapshot

670+ certified products

210 members

2 in-person members meetings

5 liaison partners

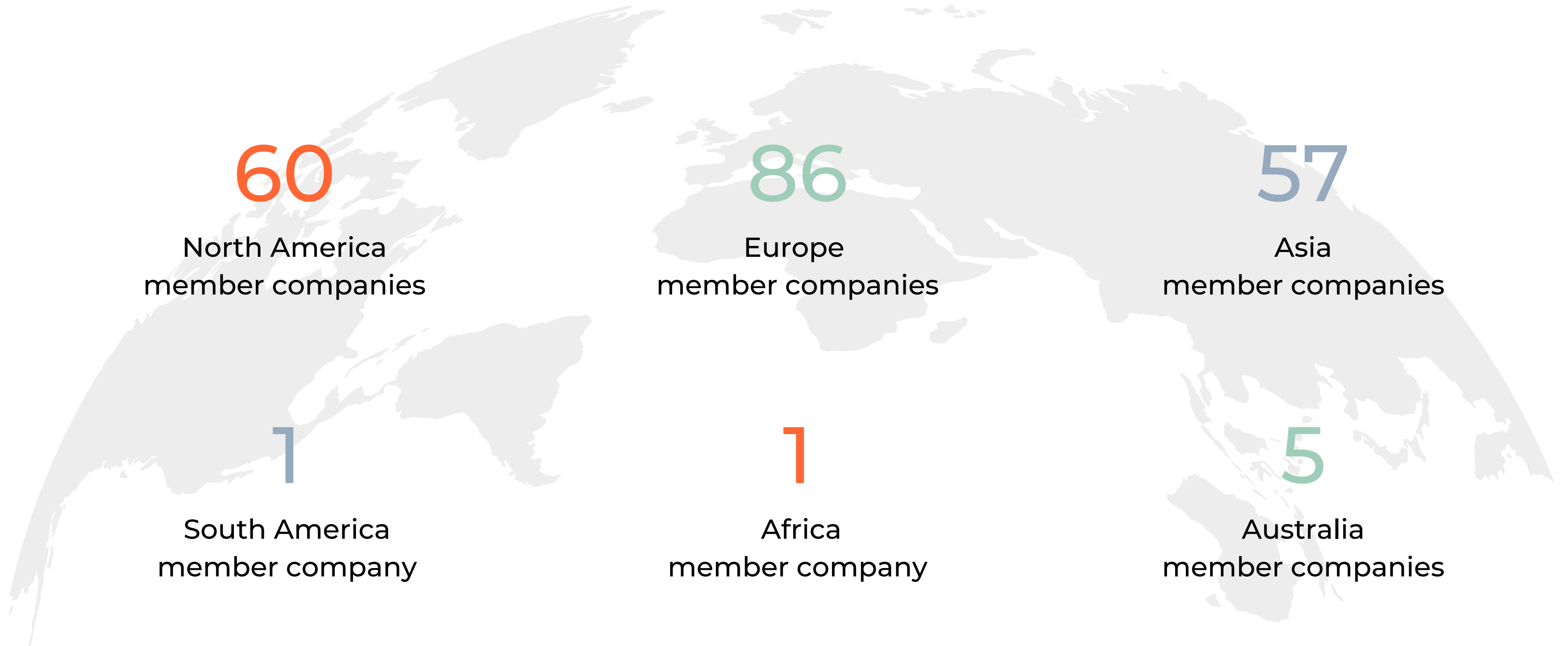**22%** net member increase

12 industry events attended

103K web users

1 spec release

Growth & Global Reach

Global Reach

60

North America
member companies

86

Europe
member companies

57

Asia
member companies

1

South America
member company

1

Africa
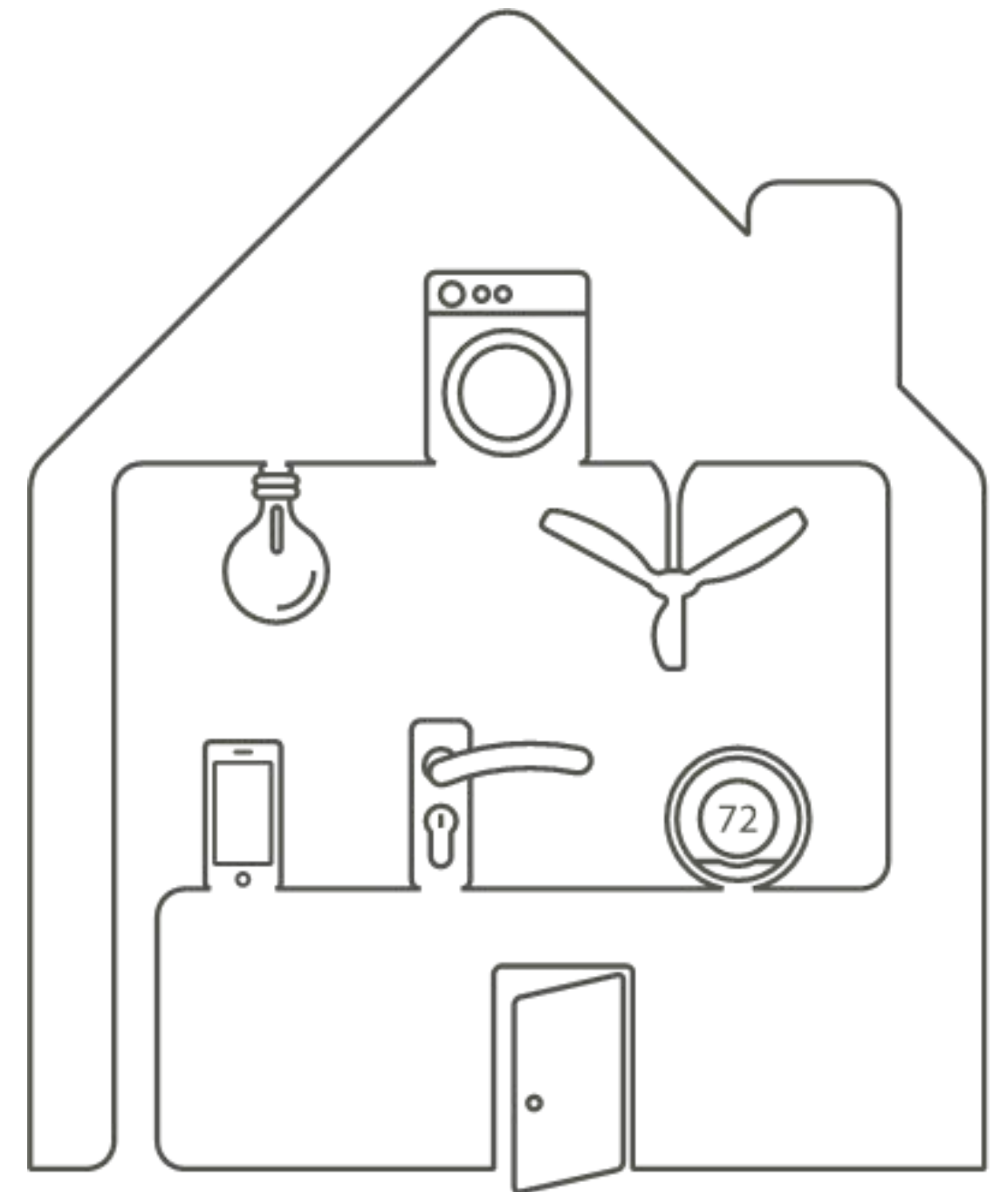member company

5

Australia
member companies

Thread in the Smart Home

The launch and adoption of Matter has driven Thread into the mass market smart home.

Millions of homes have Thread infrastructure thanks to its inclusion in popular smart home "hubs" from brands like Amazon, Apple, Eero, Google, Samsung, and more, in products ranging from routers to smart displays and speakers to TVs.

Recent updates to Matter for Home Routers and Access Points will drive further proliferation of Thread, including through Internet Service Providers. And with Thread now emerging in mobile devices, more users will be able to start their smart home journey with Thread even before they have Thread-enabled infrastructure in their homes.

With this infrastructure in place, consumers have been able to connect Matter-over-Thread devices that benefit from enhanced range, reliability, and battery life, making Thread a differentiating feature of a new generation of smart home devices.

Adoption of Thread in Europe

Thread's presence in Europe's smart home and building ecosystem is growing further. Most member companies are from Europe. Thread is always present, promoted, and demonstrated at events like:

- ISH for HVAC, Water and Building Automation
- L+B Light & Building Technology,
- IFA for Small- and Major home appliances
- Local events with partner organizations like KNX, DALI, BACnet EU.

EU-based companies like ABB, Siemens, Schneider, Ledvance, Assa Abloy, STMicro, NXP play an important role in shaping the market. There are many off-the-shelf Thread solutions available.

Furthermore, Thread was adopted in Google's Android and Apple's iOS and Thread became an important part of the Matter, DALI+ and KNX IoT solutions.

Looking ahead, the Fall 2025 EU member event will be held in Stockholm from Oct. 13 to 16. This will include strategy meetings, as well as an open house and a demo event to show the latest implementations.

Adoption of Thread in China

Thread continues to gain momentum in China in 2024, experiencing a 39% membership increase in China-based companies. Thread Group's prominent presence at the International Internet of Things Expo greatly expanded our reach and visibility in China. Beyond the expo, the Thread Group has made substantial progress in establishing a robust digital presence, particularly on WeChat, and continues to see a steady increase in subscribers, further solidifying Thread's influence in the region.

Thread Group has strengthened its strategic relationship with the Connectivity Standards Alliance in promoting our mutual technologies in China. A major highlight was the invitation extended to Sujata Neidig, Vice President of Marketing for the Thread Group, to represent Thread Group at the Matter Open Day panel in Guangzhou in June 2024, significantly enhancing the recognition of the Thread protocol in China.

Chinese device makers account for dozens of Thread device brands and SKUs internationally. Domestically, as the DIY smart home market continues to grow, so do the number of Thread-based smart home products available for Chinese consumers.

Industry Collaboration

KNX is one of the most ubiquitous building automation solutions in the world. Building on this proven technology, the introduction of the IP-based KNX-IoT protocol allows the technology to expand further, embracing the benefits that IP networks bring. KNX-IoT has chosen Thread as its low-power, mesh, wireless networking solution, bringing the flexibility, scalability, and security of Thread to the KNX-IoT ecosystem.

Throughout 2024, KNX IoT demonstrated excellent progress in product development and industry collaboration, reinforcing its leadership in smart home and building automation.

DALI is the world's leading technology for professional and industrial lighting, used in a wide variety of application fields ranging from office buildings to industrial sites. Extending the proven DALI technology into the world of IP-based networks with DALI+ allows the standard to embrace the scalability and security benefits that IP brings. DALI+ extends choice, flexibility, and creative freedom for lighting designers and specifiers by supporting the development of wired, wireless, and IP-based systems, using DALI throughout.

DALI+ has chosen Thread as its wireless networking component, further extending DALI+'s flexibility in installation, configuration, and retrofitting possibilities. The first large scale implementations of DALI+ over Thread in buildings have started.

matter

Matter is the single standard that lets developers and users connect their devices to the platforms of their choice. Built by the 400+ members of the Connectivity Standards Alliance, supported by major smart home platforms and brands, and already in millions of homes, Matter is making building and using smart home devices simpler, easier, and more reliable.

As an application layer, Matter supports devices using Wi-Fi, Ethernet, and of course, Thread. By supporting Thread, Matter device makers have been able to build new kinds of devices and improve existing devices, while working seamlessly with the rest of the home.

Thread Adoption

2024 Certification Status

282
BUILT ON THREAD

72
THREAD CERTIFIED COMPONENT

670+
Thread Certified
Products & Components
Cumulative

Border Routers

A Thread Border Router enables Thread devices to connect to the local network so that they can communicate with other devices built on IP-based technologies such as Wi-Fi or Ethernet. Thread Border Routers may be built into existing products, such as Wi-Fi access points, smart speakers, TVs, and more.

Devices that need a Thread Border Router carry this badge

Products using Thread carry this badge

Devices that act as a "Border Router" carry this badge

Smart Home

The smart home is rapidly evolving towards a mass-market approach, with a vision to make technology part of the core infrastructure of our homes.

Open standards, led by Matter with Thread, are a critical step towards this vision, giving users many options of devices and brands, and the confidence that they will work for years to come.

Thread is also enabling a greater diversity of devices, including new types of sensors that make our homes more responsive and safe. Thread devices perform reliably in more places, have longer battery life, and adapt to infrastructure changes over time.

ProHome & Building

As part of a global trend towards IP-based building automation solutions, Thread adoption is widely increasing in the commercial building space. Driven primarily by the wish to integrate formerly individual application silos, applications, and protocols into one unified and easy-to-maintain IP-based network, Thread is quickly becoming an indispensable component of this development.

It brings flexibility in installation and simplifies retrofitting opportunities while offering wide range coverage, and industrial-level security. Leading building automation platforms like KNX-IoT, DALI+, and Matter are supporting Thread as their low-power, mesh-enabled, wireless communication standard.

Member Testimonials

eve.

"With Thread, we enabled a smooth transition to Matter, ensuring long-term value for our customers"

"Thread adds responsiveness and reliability while preserving battery efficiency, allowing Eve to deliver superior products without compromise."

nami

"Choosing Thread has been transformative for nami. The technology's flexibility and scalability have allowed us to focus on creating tailored solutions for safety and healthcare challenges. Our advice? Identify your core use cases and let Thread empower your unique business goals. The future of IoT is here, and Thread is paving the way."

arre

"People have been telling us how much they love the responsiveness of Thread, especially on our arre Smart Button. One customer called and said clicking the wireless switch is tantamount to clicking the WIRED wall switch which has a direct connection to their smart light (also Thread)."

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About Us

Mission

Through industry collaboration, the Thread Group delivers an open and global wireless mesh networking protocol that extends IP infrastructure in homes and buildings. This low-power, reliable, and secure network enables the most diverse ecosystem of IoT devices.

Vision

To provide a ubiquitous low-power wireless networking technology that seamlessly enables devices, systems, and services to make them more sustainable, secure, and reliable.

Thread Group 2024 Officers

Vividh Siddha, President
Apple

Sujata Neidig, VP Marketing
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Jonathan Hui, VP Technology
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Silicon Labs

Community

The Thread Group is a member-driven organization of leading and innovative companies from around the world. Each volunteers their expertise and market experience to evolve Thread's open and robust technology, addressing the IoT market's needs today and in the future.

Powered By Our Members

Thread Group's success is due to the participation of our members.
Thank you to our Sponsors.

amazon

Apple

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LUTRON

NXP

NORDIC SEMICONDUCTOR

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somfy

SmartThings

SILICON LABS

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Woven by Toyota, Inc.

Xthings Industry

Zemismart Technology Limited

as of 3/18/2025

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CA Engineering	British Columbia Institute of Technology	SENSEREO LIMITED
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Mobilus Motor sp. z o.o.	Leipzig University of Applied Sciences	
Nanoleaf	Northeastern University	
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Streamergy GmbH	San Jose State University	
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	University of York, UK	
	UTN.BA	
	ZHAW Institute of Embedded Systems	

Membership Benefits	Academic	Affiliate*	Associate**	Implementer	Contributor	Sponsor
Access To Members-Only Website	✓	✓	✓	✓	✓	✓
Use Of Alliance Member Logo	✓	✓	✓	✓	✓	✓
Participate In All-Member Sessions of General Meetings	✓	✓	✓	✓	✓	✓
Participate In Promotional Materials	✓	✓		✓	✓	✓
Access To Pre-Publication Draft Specification	✓	✓		✓	✓	✓
Access to IP Rights As Defined with Certification			✓	✓	✓	✓
Ability To Certify Devices By Inheritance For Approved Scenarios			✓	✓	✓	✓
Participate In Committee Sessions Of General Meetings				✓	✓	✓
Access To Thread Test Harness				$	FREE	FREE
Ability To Pre-test And Certify Devices At Thread Group ATLs					✓	✓
Ability To Purchase Thread Test Bed					✓	✓
Access All In-Process Draft Specifications					✓	✓
Access To Thread Reference Commissioning App					✓	✓
Authorize And Refer Associate Members					✓	✓
Participate And Vote In Work Groups and Committees					✓	✓
Chair Work Groups And Committees					✓	✓
Initiate Work Groups Or Committees						✓
Approve Operating Budget						✓
Approve Final Deliverables						✓
Automatic Seat On Board Of Directors						✓
Annual Fee	$-	$1,000	$-	$7,500	$20,000	$85,000
One-Time Initiation Fee						$45,000

*Open to organizations with fewer than 50 employees.

**White-label or rebrand certified products only

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