

The background of the slide is a photograph of a modern, curved building with a glass and metal facade, viewed from a low angle looking up. The Thread Group logo, a stylized 'T' with a dot, is positioned to the left of the company name.

THREAD GROUP

# Annual Report

2023

Smarter homes.  
Smarter buildings.



A modern, two-story building with large glass windows and balconies is illuminated at night. In the foreground, several palm trees are planted in long, rectangular concrete planters. The building's interior lights are on, and some exterior lights are visible. The sky is dark blue with some clouds. A large orange circle is overlaid on the right side of the image, containing the Table of Contents text.

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# A Letter from Vividh Siddha

## President of Thread Group

I am thrilled to share Thread Group's inaugural annual report, which highlights our community's extraordinary achievements and initiatives that are redefining the industry. As we reflect on 2023, we are grateful to our members, and I am proud to be a part of such an amazing community.

In 2023, Thread witnessed substantial expansion, with a noteworthy 26% surge in membership, resulting in a cumulative count of 170 members spanning over 24 countries. China experienced significant growth in membership, which is a clear indication of the extensive ecosystem of Thread. We warmly welcomed new member companies, including Athom B.V., British Telecommunications Plc, Cisco Systems, Infibrite Inc., and Inovelli Labs Corporation.

Additionally, the previous year marked the introduction of over 300 cumulative Thread products and components. In 2023 alone, more than 70 end products and 65 components were introduced. Presently, over 52% of these products offer Matter support, and this percentage is anticipated to increase even further over the next year. In 2023, the principal objective was to provide end users with knowledge regarding the procurement of Thread devices and the capabilities of Thread Border Routers. Amazon, Apple, Samsung, and Google were among the major ecosystems that offered support for Thread Border Routers. The ongoing partnership with CSA serves to augment the visibility of Thread-compatible Matter controllers on the market.

Last year, both Google and Apple made noteworthy announcements regarding their announcements to incorporate Thread support into mobile devices.

We have commenced the process of developing and specifying requirements for Thread on mobile devices in anticipation of the emergence of compelling use cases by 2024.

We are more optimistic than ever as Thread Group approaches its 10th anniversary on July 15, 2024, due to the development of the Matter, KNX, and DALI+ ecosystems that support Thread. Significant advancements were made to Thread specifications at the start of 2024, including secure commissioning at scale, credential sharing, and ubiquitous internet connectivity. Additionally, Thread over Infrastructure was implemented. The purpose of these improvements is to enhance resilience and expandability in response to input received from early adopters, consumers, and ecosystem partners. In 2023, Thread made significant investments to strengthen its ecosystem. We invested in an interop lab in Albuquerque to bring together products from our ecosystem to test for stability and interoperability, as well as provide input to companies developing Thread-enabled products. This would significantly improve multi-ecosystem compatibility and user experience for Thread product users.

We are extremely pleased with our accomplishments in 2023 and anxiously await 2024, where we will have expanded collaboration, reached additional product development milestones, and celebrated Thread's 10th anniversary. As always, I appreciate your continued support.

Best, Vividh Siddha President of Thread Group

Thread Group saw great momentum in 2023 across all areas, and we anticipate even greater continued growth in 2024.





# About Us



# Mission and Vision

The Thread Group brings the Internet to the Internet of Things through its IP-based, low power, secure and future proof mesh networking technology.

Our vision is to serve as the foundation of the Internet of Things by seamlessly connecting devices where we live and work.



# Thread Group 2023/2024 Board Officers



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**NXP Semiconductors**



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# Thread Group 2023/2024 Board of Directors



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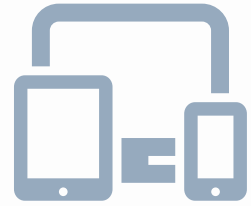
## Community

The Thread Group is a member-based organization of leading and innovative companies, who bring their diverse expertise and market experience to create an open and robust technology that meets the needs of today's IoT market.



# 2023 Snapshot

310+  
certified  
products



164  
members



2  
in-person  
members  
meetings



6  
liaison  
partners



26%  
net  
member  
increase



5  
industry  
events  
attended



35K+  
website  
users



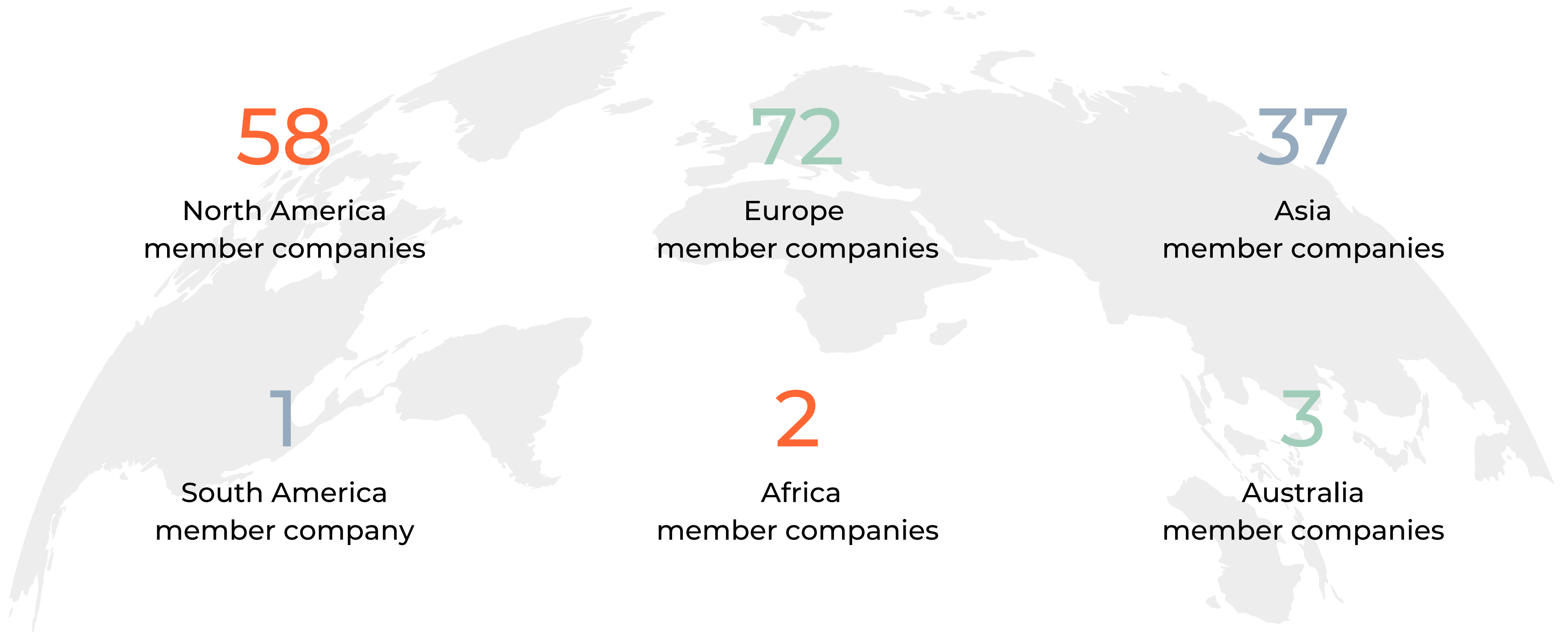




# Growth & Global Reach



# Growth & Global Reach





# Adoption of Thread in North America

While Thread had already been gaining ground in North American consumer products over the last few years, the launch and adoption of Matter — the new open smart home interoperability standard — has now driven Thread into the mass market.

Thread has reached millions of homes through its inclusion in popular smart home “hubs” from brands like Amazon, Eero, Apple, Google, and Samsung, in products ranging from routers to smart displays and speakers to TVs. With this infrastructure in place, consumers have been able to connect Matter over Thread devices, that benefit from Thread’s range, reliability, and battery life.



**58**  
companies

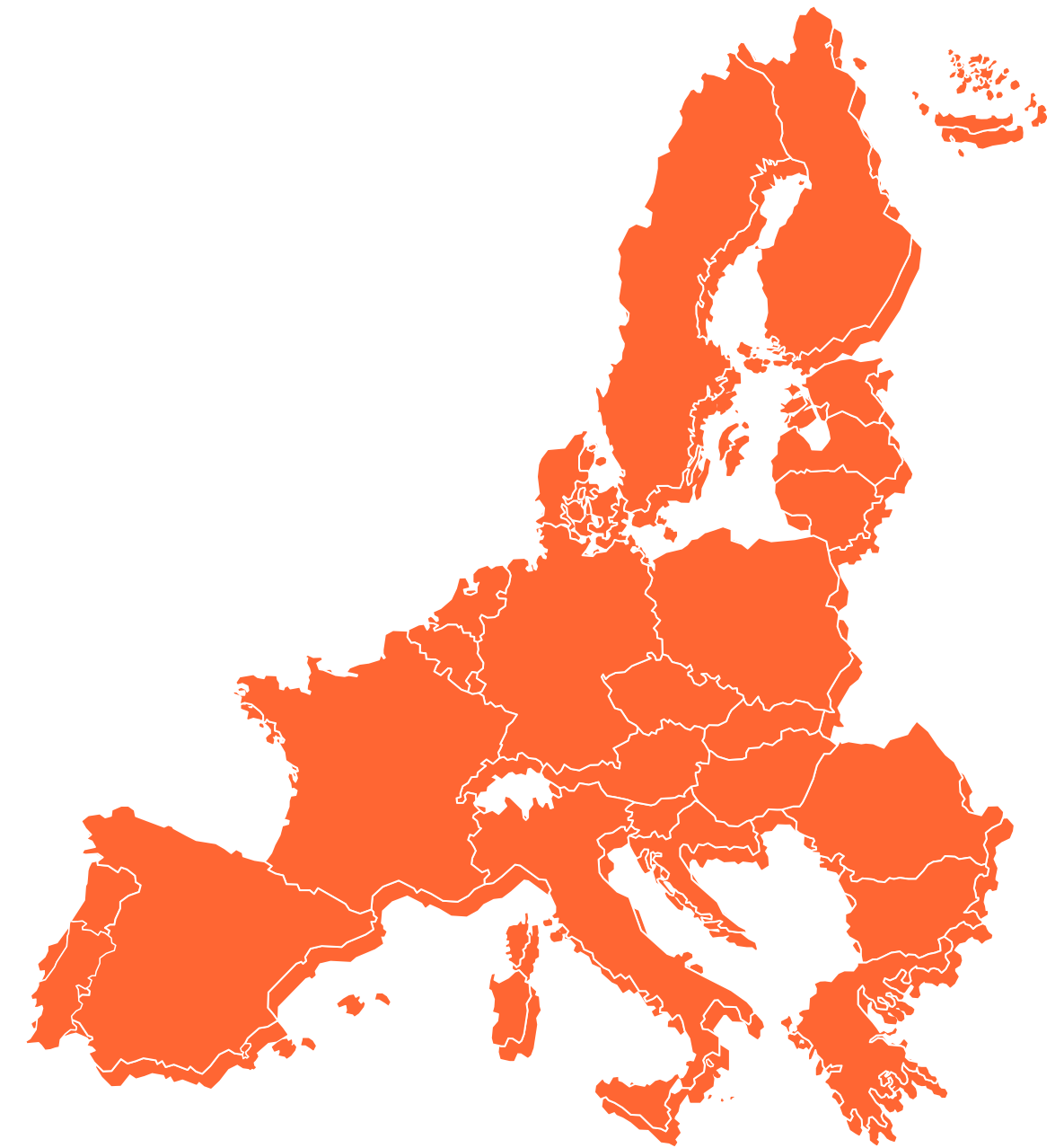
**17**  
states



# Adoption of Thread in Europe

Adoption of Thread in Europe is growing steadily, driven in part by the EU requirements on carbon neutrality and sustainability, and new directives such as the Energy Performance of Buildings Directive (EPBD).

Thread fits seamlessly with the European directives for building owners and product makers to apply environmentally conscious, secure, and private technologies.



**72**  
companies

**15**  
countries



# Adoption of Thread in China

The growing adoption of Matter has spurred IoT brands in China to actively seek knowledge about, or join, the Thread Group. The Apple ecosystem is creating momentum within the China market for the adoption of Thread technology, which has led to an increased awareness of Thread among both enterprises and consumers.

The China Marketing Working Group observed significant engagement and growth on WeChat throughout 2023. They also successfully organized the first large-scale exhibition of the Thread Group in China at IOTE and assisted Thread Group members during Connectivity Standard Alliance (CSA)'s Matter Interoperability Wall and Matter Developer Conference in China.



19  
companies

11  
cities





# Industry Collaboration





KNX is one of the most ubiquitous building automation solutions in the world. Building on this proven technology, the recent 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.

In 2023, Thread Group began the process of supporting the new KNX-IoT Incubator project, where innovative startup companies are leveraging KNX-IoT and Thread technologies to give light to the next wave of building automation solutions.







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.







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



# 2023 Certification Status

70



65



310+

**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.

Products using Thread carry the Thread badge, many with the “Requires Border Router” or “Border Router” mark to help consumers know they’ll need a Thread Border Router, or help them find one.



## 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.





## Commercial

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.





# Our Members



Thread Group success is due to the participation of the membership.

Thank you to our SPONSORS...



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# CONTRIBUTORS

ADT	GL Technologies (Hong Kong) Limited	Realtek
Allegion/Schlage Lock Company LLC	Granite River Labs	Reliance Jio
Allion Labs, Inc.	Grundfos Holding A/S	Renesas Electronics Corporation
Amlogic (Shanghai) Co., Ltd.	Häfele SE & Co KG	Resideo Technologies
Arpobot Pty Ltd	Hager group	Robert Bosch GmbH
Athom B.V.	HooRii Technology Co., Ltd	Rollease Acmeda
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Delta Electronics	Nanoleaf	VELUX A/S
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ecobee Technologies Inc.	Rachio Inc	zencontrol Pty Ltd
Espressif Systems (Shanghai) Co., Ltd.	Rafael Microelectronics, Inc.	Zumtobel Group AG



# IMPLEMENTERS

Aeotec Group GmbH	FloLogic Inc.	Qingping Technology (Beijing) Co., Ltd.
Aira Group AB	GARDENA GmbH	RivieraWaves a CEVA Company
Alif Semiconductor, Inc.	geo	Schneider Electric
Astronics AES	GEWISS S.p.A.	Secuyou
Atmosic Technologies	Guangdong A-OK Technology Grand Development Co.,Ltd.	Shenzhen Heiman Technology Co., Ltd.
Basalte BV	Infibrite Inc	Shenzhen Hope MIEL Co., Ltd - HOPERF
Belkin International	Inovelli Labs Corporation	SIEGENIA-AUBI KG
C.Ed. Schulte GmbH Zylinderschlossfabrik	Insta GmbH	Skylux NV
Champon	ION INDUSTRIES	Sleekpoint Innovations Company Limited
Chengdu Energy Magic Cube Technology Co., Ltd	LEEDARSON IoT Technology Inc	Spintly Inc
Computime Ltd.	Level Home Inc.	Telink Semiconductor (Hongkong) Co., Limited
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ebm-papst Mulfingen GmbH & Co. KG.	Mighton Products Ltd	Vaillant Group GmbH
Eve Systems GmbH	NAMI AI	WideSky.cloud Pty. Ltd
	Nuki Home Solutions GmbH	Zemismart Technology Limited
	PAMEX INC.	



# AFFILIATES

Bono AB  
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EmCom Technology Inc.  
Fluid Technology (AU) Pty Ltd  
Golioth  
Grimsholm Products AB  
Himoace Inc.  
Ingenious Locks & Hardware Ltd  
Mediola connected living AG  
Memfault  
Mobilus Motor sp. z o.o.  
Ubilogix International, Inc.  
Uniband Electronic Corp.

# ACADEMICS

AGH University of Science and Technology  
British Columbia Institute of Technology  
Carnegie Mellon University  
China University of Technology  
George Brown College  
hepia  
Iowa State University  
KIET Group of Institutions, Ghaziabad  
KTH Royal Institute of Technology  
Leipzig University of Applied Sciences  
Northeastern University  
Purdue University - AgIT  
San Jose State University  
Tampere University of Technology  
Universidad de Cádiz  
Universitat Politecnica de Catalunya  
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ZHAW Institute of Embedded Systems



Membership Benefits	Academic	Affiliate*	Implementer	Contributor	Sponsor
Receive Member Communications	🔽	🔽	🔽	🔽	🔽
Access to Members-only Website	🔽	🔽	🔽	🔽	🔽
Use of Alliance Member Logo	🔽	🔽	🔽	🔽	🔽
Participation in Press Articles & Interviews	🔽	🔽	🔽	🔽	🔽
Access Draft Specification / Documents	🔽	🔽	🔽	🔽	🔽
Access Final Specification / Documents	🔽	🔽	🔽	🔽	🔽
Participation in General or Annual Meetings			🔽	🔽	🔽
Access to IP – Gain Intellectual Property Rights (IPR) for Thread Technology, Typically with No Royalty Payments			🔽	🔽	🔽
Certify by Inheritance Compliant Components and Products and Utilize Alliance Certification Logo			🔽	🔽	🔽
Certify at ATL Compliant Components and Products and Utilize Alliance Certification Logo				🔽	🔽
Ability to Purchase Thread Test Bed			🔽	🔽	🔽
Option to Purchase Thread Test Harness			🔽		
Free Access to Thread Test Harness				🔽	🔽
Access to Thread Reference Commissioning App				🔽	🔽
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	\$ -	\$750	\$7,500	\$15,000	\$65,000
One-time Initiation Fee					\$35,000



# THREAD GROUP

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-  @TheThreadGroup
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