

# ZigBee Development Services

## OVERVIEW

- ZigBee Center of Excellence: get your product faster to the market
- Royalty- and license-free service model: own every product that we develop for you
- One-stop ZigBee design house: shop for product designs; application and complete stack development services; training and consulting services, all under one roof

## Why Partner with a Global ZigBee design Services Provider?

Programming lightweight wireless sensor networks and building applications present serious challenges, and it is always easier to work with a global ZigBee design services partner with the know-how and experience to deliver a complete engineering solution.

A ZigBee Alliance member since 2004, Mindteck has rich, full cycle experiences in building the complete ZigBee stack, application development and deployment, ZigBee board design and product certification. Our ZigBee consultants have worked on both multi-vendor and single-vendor platform solutions.

Member



## Solution Matrix

Mindteck's ZigBee Center of Excellence (CoE), a technology hothouse, is credited with incubating several key R&D projects. The CoE offers the following solutions.

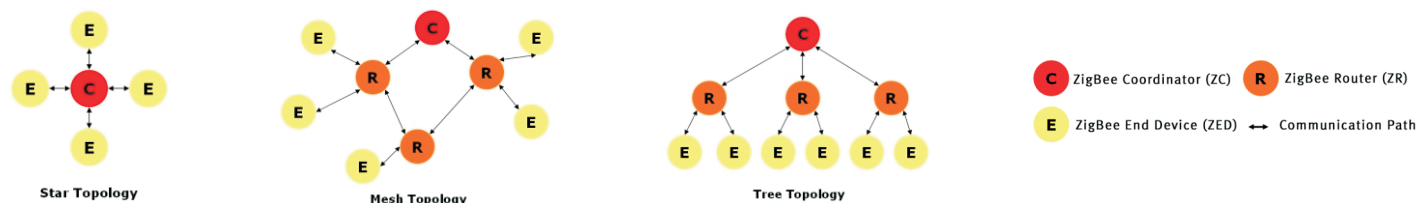
- Complete ZigBee compliant stack, application development, porting and support on various platforms; customized and optimized firmware for platforms and applications
- Comprehensive capabilities in embedded software and digital hardware development and wireless technologies providing incredible time-to-market advantages
- A royalty- and license-free service model coupled with proven offshore advantage, drastically slashing development costs. technologies providing incredible time-to-market advantages

What's more, you own every product that we develop for you.

## Application Design Services

Developing ZigBee solutions is rife with challenges right from platform-selection to designing and developing applications. For successful ZigBee implementation, it is imperative that you rely on a partner with intimate architectural knowledge. Additionally, the partner should have proven competence in assessing chip/module level design options and coping with on-field implementation issues.

Our ZigBee CoE, a one-stop ZigBee design house, takes care of product evaluation, design, development, implementation and deployment. Some R&D efforts include ZigBee Cluster Library; remote monitoring and measurement profile; simpler API interface to all ZigBee compliant stacks; reusable, application-to-stack interface architecture across all major ZigBee compliant platforms. deliver these benefits.



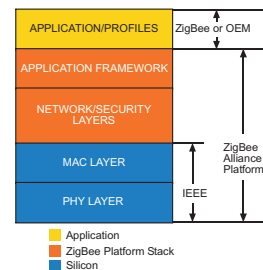
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The CoE primarily serves the following application design segments.

- Industrial Automation: asset management, energy management, process control
- Building Automation: AMR, HVAC, lighting control, security and safety installation
- Home Automation: AMR, entertainment systems, home networking, lighting control, remote control, security and safety installation
- Wireless Sensor Application: asset tracking of mobile, tagged entities; indoor and outdoor environmental monitoring; structural health monitoring

## Stack Development Services

Mindteck an early ZigBee participant, has designed and developed ZigBee compliant protocol stack including network layer, application support sub-layer, ZigBee device objects (ZDO), ZigBee device profiles, ZigBee application framework (AF) and security service provider (SSP); platform specific components such as power save modes, timer modules, persistent storage mechanism, test harness suite and UART driver; and MAC layer.



## Training and Consultancy

Our ZigBee training and consultancy services help customers lower costs and risks, shorten technology adoption and application development times by imparting:

- Rich overviews of WPAN standards and 802.15.4 standards
- In-depth trainings in ZigBee standards, 802.15.4 Radio, PHY, MAC, Application support sub-layer, ZigBee device objects, ZigBee application framework, security service provider, platform specific components, network design and application development, ZigBee Cluster Library, application profiles, PC based configuration tools
- Comprehensive understandings of target markets and applications, product/module evaluation and selection, module integration, ZigBee digital hardware

## About Us

Mindteck is a global IT services company providing a range of solutions that enhance customers' business performance noticeably. Our focus areas are:

- Embedded Systems
- Enterprise Consulting – SAP
- IT Services

Mindteck is an ISO 9001:2000 and ISO 27001:2005 assessed, SEI CMM level 4 certified company. With a presence in USA, UK, India, Bahrain, Singapore and Malaysia, Mindteck has a truly global reach.

Our state of the art development centers in India and Singapore are well equipped with latest technologies for enterprise-wide communication and networking, productivity, collaborative software engineering, and distributed project management.

## Office Locations

### United States of America

California      New Jersey  
Texas              North Carolina

### Europe              Middle East

London              Bahrain

### India

Bangalore          Kolkata

### ASEAN

Singapore          Malaysia

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