

# ZBOSS

## ZBOSS

ZBOSS from DSR is an independent, portable and high-performance Zigbee protocol stack. ZBOSS now supports Zigbee 4.0 released in 2025 by the Connectivity Standards Alliance.

## Benefits

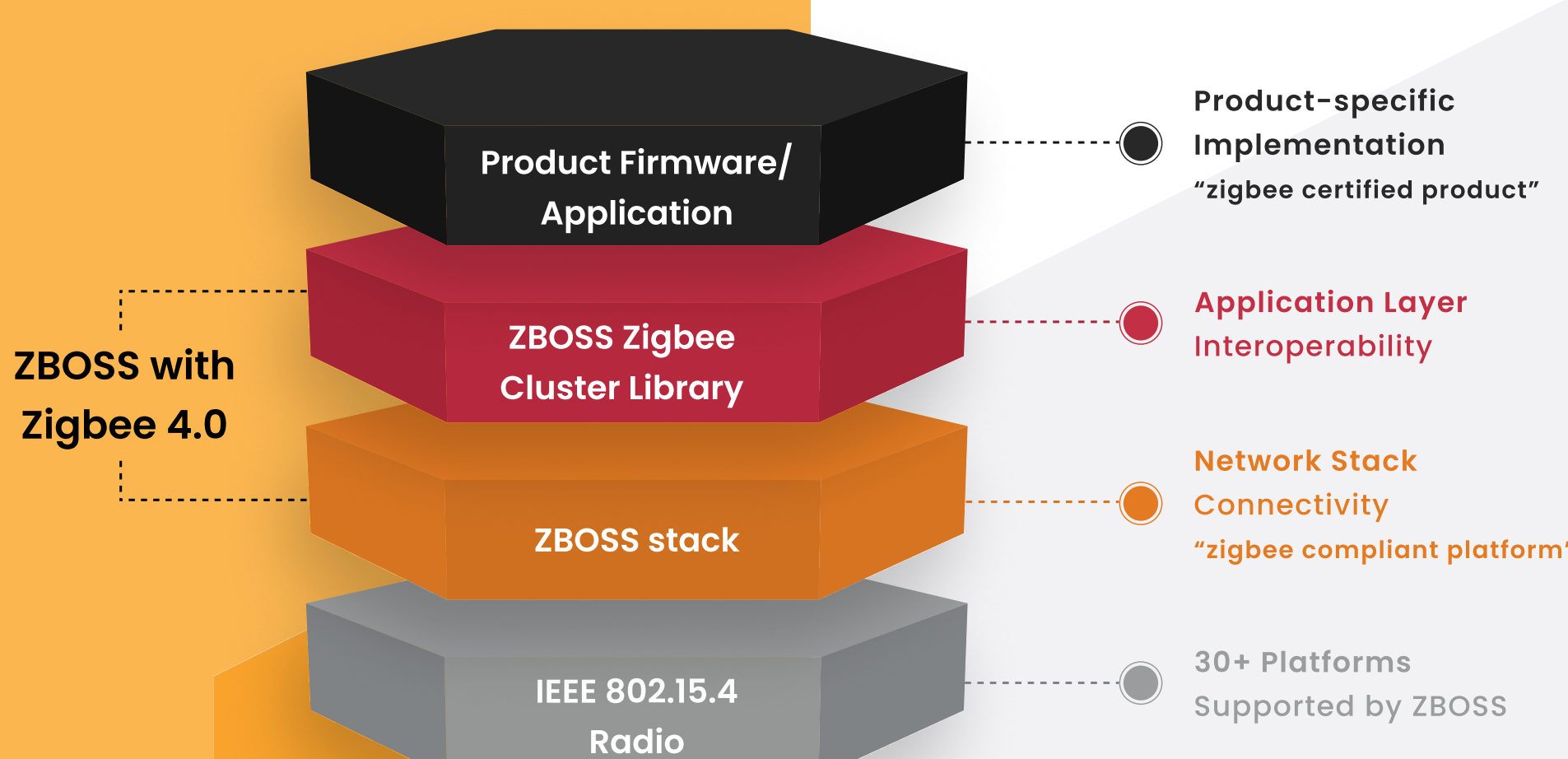
- Hardware-independent
- Cross-platform: ported to 30+ platforms
- OS-less and RTOS configuration
- Fixed memory footprint
- Low RAM usage: optimized for restricted devices
- Easy-to-use API

## Features

- Zigbee 4.0
- All device roles (ZC, ZR, ZED)
- Zigbee Cluster library (building blocks for consumer devices)
- Zigbee Green Power
- Smart Energy 1.4
- Sub-GHz band support
- Zigbee Direct
- State-of-the art Security
- Development tools: Network Simulator, Air Sniffer, Embedded Diagnostics
- Complete CI/CD to accelerate testing and certification

## Zigbee 4.0

Zigbee 4.0 includes complete implementation of the updated security architecture, onboarding enhancements, Sub-GHz features, and Smart Energy interoperability defined in the new specification.



## Get Access

Get access to DSR's ZBOSS at  
[www.dsr-zoi.com](http://www.dsr-zoi.com)  
[www.dsr-iot.com](http://www.dsr-iot.com)  
[contact@dsr-corporation.com](mailto:contact@dsr-corporation.com)

## Zigbee Direct

A new Zigbee functionality that enables onboarding and control of Zigbee devices using Bluetooth Low Energy.

## Security Enhancements Across Device & Network Layers

Updates Dynamic Link Key, Device Interview, formalized parent selection, restricted mode, hardened onboarding, and enhanced Trust Center handling of device authentication and swap-outs.

## Smart Energy Coexistence

Smart Energy Authentication Level Control improvements enable the Trust Center to identify the level of authentication on each device to aid partner devices in communicating only with the required level of security

## Batch Commissioning Improvements

Enhanced batch commissioning supports simultaneous authentication and configuration of device groups.

## Sub-GHz Support

Sub-GHz bands in support for Europe and North America deliver increased signal strength and reach.

# ZBOSS ZIGBEE 4.0 NEW FEATURES

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[www.dsr-iot.com](http://www.dsr-iot.com)  
[www.dsr-zoi.com](http://www.dsr-zoi.com)

## About DSR

DSR is headquartered in Denver, Colorado and has over 25 years of software development experience. DSR is your company's technology partner, specializing in developing Wireless Solutions, Firmware, IoT Frameworks and Mobile Apps that fit your specifications. DSR is ready to serve your technology needs and empower you toward future success. We actively participate and lead the development of industry standards through organizations like the Connectivity Standards Alliance.

## IoT Areas of Expertise



Firmware

Wireless  
Expertise

IoT  
Framework

Mobile  
Apps