

# Z-WAVE EMBEDDED DEVELOPMENT KIT

# For Embedded Z-Wave Software and Hardware Development

Sigma Designs' Z-Wave Embedded Development Kit consists of the hardware and software tools required for Z-Wave embedded product development.

The Z-Wave Embedded Development Kit includes sample embedded applications for quick prototyping, Z-Wave protocol sniffer tools for analyzing and resolving issues, and Z-Wave RF modules for building prototypes.

The Z-Wave Embedded Development Kit is comprised of two hardware kits and an SDK that when combined provide all the necessary tools to develop Z-Wave embedded products. The Base Kit consists of the standard hardware needed for all developers. The Regional Kits provides the hardware with regional frequency dependancy. The downloadable Z-Wave Protocol SDK provides all the embedded software components.

All licensees of the Z-Wave Embedded Development Kit are entitled to free online support and training.

#### BUY A DEV KIT

Purchasing a dev kit is the first step to developing Z-Wave products. Dev Kits are available

for purchase from our global distributor partners.

contact a distributor »

#### BENEFITS

- One kit covers all Z-Wave regions
- Access to download center for complete Z-Wave protocol stack and API function
- · Versatile development module for easy hardware prototyping
- Application Framework included for fast application prototyping (Sample Code Libraries)
- Real-time Z-Wave Zniffer included for frame flow
- Developer-friendly instructions, user guides, application notes, and more

#### KEY FEATURES

- Comes with license to use Z-Wave technology world-wide
- Access to protocol SDK
- All hardware needed to develop embedded Z-Wave applications

#### TARGET APPLICATIONS

• Z-Wave end devices such as door locks, lights, sensors, and thermostats



## Z-Wave Base Kit

What's in the box? The Z-Wave Base Kit consists of development platform boards, power supply units, cables, etc., that are used to program Z-Wave modules with a Z-Wave application.



# Z-Wave Regional Kit

The Z-Wave Regional Kits is available in three frequency variants and consists of Z-Wave ZDB5101, ZDB5202, ZDB5304 reference design modules that are RF-matched for specific regions. The Z-Wave Regional Kits also contains samples for prototype development.



# Z-Wave Protocol SDK

The Z-Wave Protocol SDK is available for download on the Z-Wave Technical Site (ZTS); access to the download center is included with the Z-Wave Embedded Development Kit. From the ZTS, developers can access all relevant technical documentation, developer's FAQ, known issues database, etc.

#### HARDWARE IN THE BASE KIT

- 4 x ZDP03A Z-Wave development platform
- 4 x Flexi antenna Antennas for ZDB5xxx
- 4 x USB cable To connect to ZDP03A
- 1 x Battery pack To make ZDP03A portable
- 4 x Power supply unit For ZDP03A
- 1 x UZB-S USB stick network-sniffer
- 1 x Getting Started with Z-Wave
- 4 x ZM5101

#### 3 REGIONAL KITS

Europe\* (E), USA\* (U), Japan\* (H) each containing:

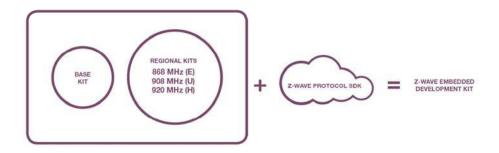
- 2 x ZDB5101
- 2 x ZDB5202
- 1 x ZDB5304
- 1 x UZB USB stick static controller
- 4 x ZM5202
- 4 x ZM5304

\* may be re-programmed to support additional countries see full list (/about\_z-wave#where\_zwave\_works)

#### SOFTWARE DEVELOPERS KIT - DOWNLOADABLE

- Embedded sample applications
- Z-Wave Plus Application Framework
- Development tools
  - Z-Wave Programmer
  - Z-Wave Zniffer
  - Build environments

• All necessary tools to build your Z-Wave application



## Z-Wave Protocol Development

## Z-WAVE PROTOCOL SDK

The Z-Wave Protocol Developer's Kit (SDK) is intended to help developers creating Z-Wave-enabled products in a fast and cost-effective manner. The software consists of Z-Wave libraries supporting controller and slave devices, as well as sample code for a broad range of home automation applications.

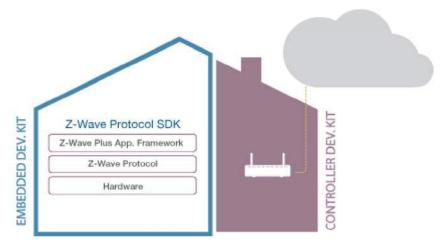
Along with the SDK, licencees get access to network sniffer tools and tools to assist you in assessing and optimizing RF performance.

### Z-WAVE PLUS APPLICATION FRAMEWORK

Developing firmware for new Z-Wave products is simpler, thanks to the Z-Wave Plus Application Framework. The Application Framework provides sample code for many common devices, plus a modular library of robust, field-tested code that can be readily re-used. The Application Framework helps eliminate errors and minimizes the need for custom coding. As a result, the process of creating new Z-Wave applications is streamlined, typically taking less than a week or two for most new devices.

#### MINIMUM REQUIREMENTS

- Windows 7 or higher
- Keil PK51 ver 9.53





# Z-Wave Protocol

- RF solution in single chip
- Sub-1GHz
- Multi-speed: 40...100 kbps
- Low communication latency
- Wireless Mesh Networking
- Every node is a repeater
- Extremely robust
- Self-healing

- Extremely simple setup: Plug & Play
- Versatile support of installation tools
- Ultra low power
- Ideal for battery-powered sensors
- Interoperable
- Proven Device and Command Classes
- Comprehensive certifi cation program
- Some Z-Wave ASIC peripherals may require customer code development

Z-Wave Embedded Dev Kit brochure » (/docs/brochures/Z-Wave\_Embedded\_Dev\_Kit\_br.pdf)

## Where to Buy a Dev Kit

## GLOBAL & US DISTRIBUTORS

#### Digi-Key

Scott Raeker, Z-Wave Specialist Tel: +1.800.338.4105 x1630 scott.raeker@digikey.com (mailto:scott.raeker@digikey.com)