

MK UWB Kit

Mobile edition 2.0

Evaluate UWB interoperability with Apple® and Android™ mobile devices

Featuring NXP Trimension™ SR150 / SR040









UWB technology is rapidly expanding into the IoT ecosystem.

Smartphones play a significant role in driving the adoption of UWB in the IoT ecosystem as they make the technology intuitive and accessible to a broad user base.



Get ahead of this trend and start evaluating how NXP's UWB TrimensionTM technology interacts with UWB-enabled Apple® and Android devices



Mobile edition 2.0



The first evaluation kit offering **UWB interoperability** against **Apple® and Android mobile devices**.



Experience how to establish a UWB ranging session between an Apple® or Android smartphone and a UWB anchor or UWB Tag.

Leverage on the **background operation mode for mobile devices** to build **handsfree interactions** with nearby smart objects.

Evaluate the performance of **NXP's Trimension**TM **UWB IoT ICs** with Apple® and Android UWB-enabled devices.

Kick-start the design of your innovative applications by leveraging on the sample iOS and Android applications developed by MobileKnowledge and unleash UWB ability to create more precise, spatial-aware application experiences.

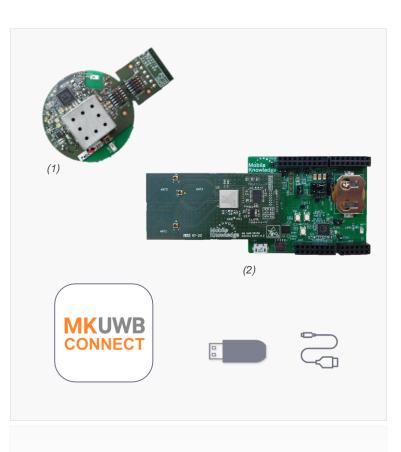


MK UWB Kit Mobile edition 2.0 What you'll find in the ki



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Featuring NXP Trimension™ SR150 / SR040



- UWB Tag SR040 reference hardware featuring NXP Trimension™ SR040 (1)
- MK UWB SR150 Anchor 3D reference hardware featuring NXP Trimension™ SR150 (2)
- MK UWB SR150 Anchor 3D reference software (source code and binaries) interoperable with Apple Nearby Interaction Accessory Protocol and Android UWB Jetpack libraries.
- UWB Tag SR040 reference software (source code and binaries) compliant with Apple Nearby Interaction Accessory Protocol and Android UWB Jetpack libraries.
- MK UWB Connect iOS source code
- MK UWB Connect Android source code
- MK UWB Kit Mobile Edition 2.0 Quick Start Guide
- MK UWB Accessory software User Manual
- MK UWB Connect User Manuals for iOS and Android
- MK UWB Shield 2 User Manual
- UWB Tag SR040 User Manual



Content in detail

MK UWB Kit

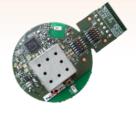
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UWB Tag SR040

MK UWB SR150 Anchor 3D



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Autonomous, battery-powered UWB device that features NXP's UWB Trimension™ SR040 chipset and a BLE-enabled microcontroller, enabling all kinds of tracking and localization use cases.

Flexible platform to develop customized UWB systems. It features Arduino-compatible expansion headers and NXP's UWB Trimension™ SR150 chipset supporting 3D positioning.



Reference Software



mobile devices

Featuring NXP Trimension™ SR150 / SR040

MK UWB Connect application





The MK UWB Connect application is available in Appstore and Play Store and is delivered as source code as part of the kit. These applications will be continuously maintained and improved by MobileKnowledge.

The iOS application implements the Nearby Interaction Protocol* supporting background operation for handsfree spatial awareness experiences.

The Android application implements MobileKnowledge Out of Band protocol through Bluetooth LE for discovery and initialization of UWB ranging session through Android UWB Jetpack libraries.

Anchor-to-Mobile software



The Anchor-to-Mobile software allows to interoperate an NXP Trimension™ SR150 Anchor against multiple Apple or Android UWB enabled devices simultaneously. It is delivered as source code as part of the kit.

Tag-to-Mobile software



The Tag-to-Mobile software allows to interoperate an NXP Trimension™ SR040 Tag against multiple Apple® or Android UWB enabled devices simultaneously. It is delivered as source code as part of the kit.

Please visit Apple developer site to obtain additional references on Apple's Nearby Interaction Framework https://developer.apple.com/nearby-interaction/ Please visit Android developer site to obtain additional references on UWB Jetpack libraries: https://developer.android.com/jetpack



Reference Software



Apple® and Android™
mobile devices

Featuring NXP Trimension™ SR150 / SR040



Anchor-to-Mobile software

The Anchor-to-Mobile software al poperate an NXP

Trimension SR150

UWB enabled devices as part of the kit.

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e kit These application

UWB ranging data

The iOS application implements the Nearby Interaction Protoco * supporting background operation for handsfree spa all awareness experiences.



Tag-to-Mobil

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The Ancroid application implements MobileKnowledge
Out of Band protocol through Bluetooth LE for discovery
and initialization of UWB ranging session through

Android UWB Jetpack libraries.

The Tag-to-Mobile software allows to interoperate an NXP

Irimension: SR040 Tag against multiple Apple® or Android UWB enabled devices simultaneously. It is delivered as source code as part of the kit.

Please visit Apple developer site to obtain additional references on Apple's Nearby Interaction Framework https://developer.apple.com/nearby-interaction Please visit Android developer site to obtain additional references on UWB Jetpack libraries: https://developer.android.com/etpack



Out-of-the-box experience



Featuring NXP Trimension™ SR150 / SR040



Android UWB-enabled

mobile device

Power up the MK UWB Tag SR040 or the MK UWB SR150 Anchor 3D **S**UWB Observe real-time ranging between the IoT device and the UWB-enabled mobile

Kick-start your own mobile-to-IoT UWB use cases





Ordering details



Evaluate how NXP's UWB Trimension™ technology interacts with Apple® and Android mobile devices

650 €

Shipping costs not included

Order the MK UWB Kit Mobile edition at MobileKnowledge's website

ttps://www.themobileknowledge.com/product/ mk-uwb-kit-mobile-edition-2-0/



Want to do more?



Featuring NXP Trimension™ SR150 / SR040

The MK UWB Kit SR150/SR040 is the most comprehensive reference design and development platform for UWB-based IoT solutions.

Leverage on UWB technology advanced functionalities and benefit from NXP Trimension™ SR150 and Trimension™ SR040 UWB IC capabilities.

Experience UWB technology with ready-to-run demonstration apps, Arduino-connected development boards and software libraries to start prototyping and developing your own UWB applications with minimum effort.

Leverage on our powerful software tools such as the MK UWB Toolbox Android application to develop innovative mobile applications, the MK UWB PC Shell application to obtain ranging information on any host computer, the MK UWB Library which provides a simple but powerful API for your IoT embedded solution and out-of-the-box support for NXP QN9090 and Nordic nRF 52840 MCUs.

Visit our website for further information:

https://www.themobileknowledge.com/product/mk-uwb-kit-sr150-sr040/

Or contact us: contact@themobileknowledge.com





Want to do more?

Contact us for further information: contact @themobileknowledge.com

Long-standing expertise in UWB technology to help you reduce your time to market and focus on your own UWB solution development

- Development of customized UWB use cases: Embedded software development, mobile application software development, back-end integration, system integration,...
- UWB technology consulting and support services: Guidance on use case definition and system integration, system architecture, software requirements, Q&A resolution, FIRA related process and use cases,...
- Design and development of customized antenna board based on customer requirements and constraints in order to optimize ranging and AoA measurements
- Porting of MK UWB SDK into a customer platform, enabling MK UWB SDK software tools and functionalities on any customer platform that meets the SDK requirements
- Licensing of MK UWB Library, for an easy integration of UWB technology while accelerating the time to market











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