## Evaluation and development kit based on DWM1001

- Demonstrate accurate location & navigation with 12 configurable devices (anchors or tags) based on the Decawave DWM1001 module

- Out-of-the-box wireless Real-Time Location System (RTLS) evaluation

- Quickly evaluate DWM1001 module capabilities

- APIs to customise the Firmware to your application

- Combine several kits to scale your RTLS network
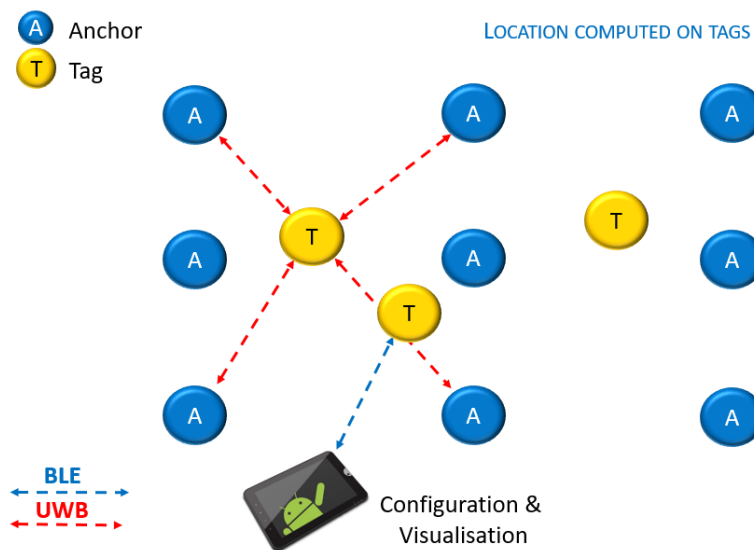
Kit Contents

- 12 DWM1001-DEV boards configurable as anchors, tags or gateway. (Gateway requires a Raspberry Pi)

- Plastic enclosures for all development boards

- USB cable for flashing & debugging (can also provide power via USB power supply or battery pack)

- Quick Start Guide

Software

- Embedded Firmware binaries (tag, anchor, gateway)

- Mobile Application (requires a Tablet or Smartphone running Android 6.0 or later)

- Web client (Q1 2018)

Power Sources

- Units require 12 x batteries and / or USB power supplies (not included):

  - 3.7V RCR123a or 16340 Rechargeable battery. Note: overcharge protection not necessary

  - Anchors and tags can be powered from USB power supplies / battery packs for long duration tests

Example Evaluation Steps – Android Application

- Mount 4+ 'anchor' units on walls & use remainder as tags

- Discover and configure units with the Android application

- Upload a floorplan & visualise the tag locations on the screen

- Modify update rates directly from the Android application
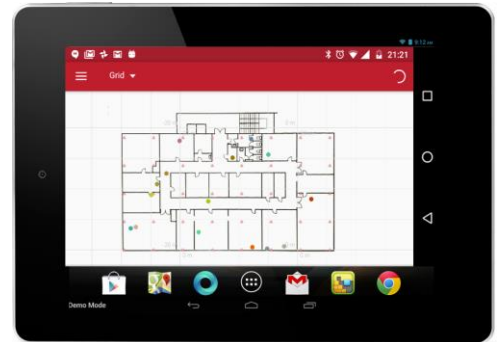
System Performance

- Maximum tag location rate: 10 Hz

- X-Y location accuracy: typically <10 cm

- Range: up to ~60 m in Line-of-Sight conditions

- Adaptive location rate using motion sensor activity enables longer battery life & higher tag density

Expand to a Centralised System

- Configure dev. board as a bridge node & add to Raspberry PI (not included) for a Linux-based gateway

- View the location and configure the system on a PC using the location application
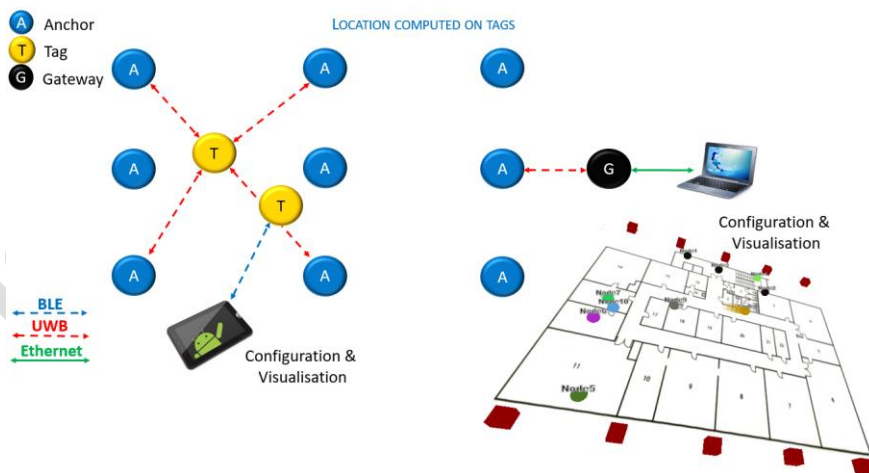
Get Started:
- Learn more at: www.decawave.com/products
- Download the RTLS SW at www.decawave.com/support/software

Join the community:
- http://www.decawave.com/decaforum/