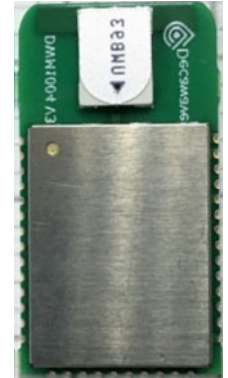


Overview

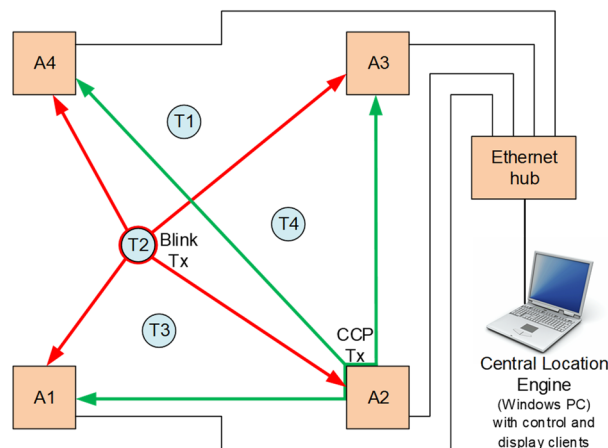
- The DWM1004C is specifically designed for TDoA tag applications but flexible enough to be used in a variety of UWB scenarios. The DWM1004C is an ideal TDoA tag solution ready for production
- The module integrates a Multiband UWB antenna, RF circuitry, STM32L041G6U6S Cortex-M0+ with AES and a LIS3DH motion sensor for smart power management and adaptive blink rate
- The DWM1004C module is based on Decawave's DW1000 Ultra Wideband (UWB) transceiver IC, which is an IEEE 802.15.4-2011 UWB implementation
- Decawave open source TDoA Tag firmware (Keil and Eclipse) supporting configurable adaptive blink rate motion detection support
- Typical LoS range point-to-point: CH2 60m, CH5 40m
- Sleep mode current <2uA
- Battery life >2 years using 500mAh battery, TDoA blink @0.2Hz
- Planned modular certification FCC/ISED and ETSI for CH2/5, 6.8Mbps
- Small form factor 31mm x 16.5mm, castellation pitch 1.27mm
- Recommended sale price is \$9.95 in 10k quantities



DWM1004C Module

Target Applications

- TDoA Tag for CH2 and CH5
- General purpose module for RTLS systems



Features

Hardware:

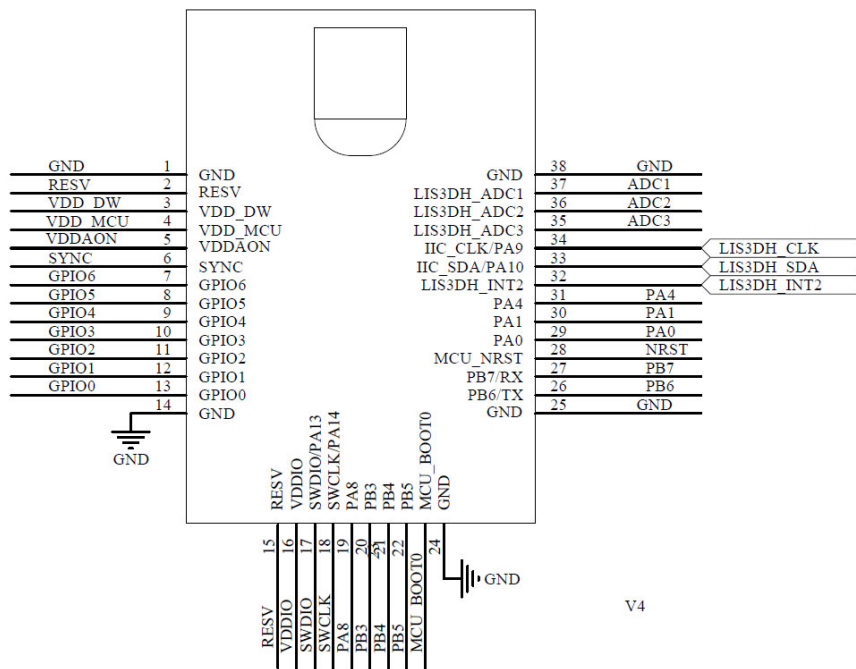
- Low cost module for high volume industrial applications
- Low-power hardware design and software architecture
- Designed for TDoA but flexible for any UWB applications
- Full RF design validated, tested and calibrated

Certification (planned):

- 2 UWB frequency bands, CH2, 4GHz and CH5, 6.5GHz
- 6.8 Mbit/s data rate, PRF64MHz, Preamble 128us

Firmware:

- TDoA Tag source code, CH2 and CH5, 6.8Mbps data rate
- Configurable adaptive blink rate accelerometer support
- Production test and certification source code provided
- Simple TWR code example provided
- Keil and Eclipse based projects



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