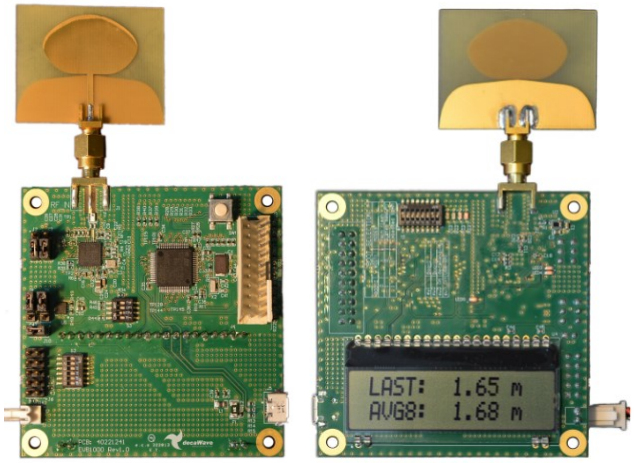
PRODUCT INFORMATION: **EVB1000**

Overview of EVB1000 Evaluation Board

- Evaluation board incorporating DecaWave's DW1000 IEEE802.15.4-2011 UWB compliant wireless transceiver IC, STM32F105 ARM Cortex M3 processor, USB interface, LCD display and off-board antenna
- DecaWave's two-way ranging application, "DecaRanging", pre-installed
- Industry standard ARM processor with 'C' source driver libraries available from DecaWave
- Full JTAG accessibility to the ARM processor using an industry standard pin-out header
- Includes an LCD display for reporting of measured range when running "DecaRanging"
- Display can be used for other functions as required depending on user programming
- On–board LED's to indicate transmit, receive and other messaging states
- Supports USB connection to an external PC if required for more extensive user interface functionality
- Allows development of applications using the TOF / two way ranging / data transfer capability of the DW1000 IC
- Off-board antenna connection allows evaluation of different antenna options
- On-board circuits designed to allow the customer measure the power consumption of the DW1000 subsystem independently of the other on-board circuitry

Key Benefits

- Integration of DW1000 IC, processor, display and user interface options simplifies UWB technology and product concept evaluation
- Optimum circuit design and layout best illustrates the performance of the DW1000
- ARM based processor allows uses of multiple tool chains / development environments
- Hardware and software support materials from DecaWave provide time-to-market advantages



EVB1000 component side & display side views

Target Applications

The DecaWave EVB1000 allows the development of applications in real time location systems (RTLS) and wireless sensor networks (WSN) across a variety of markets including agriculture, building control and automation, factory automation, healthcare, safety & security, warehousing & logistics and a range of others

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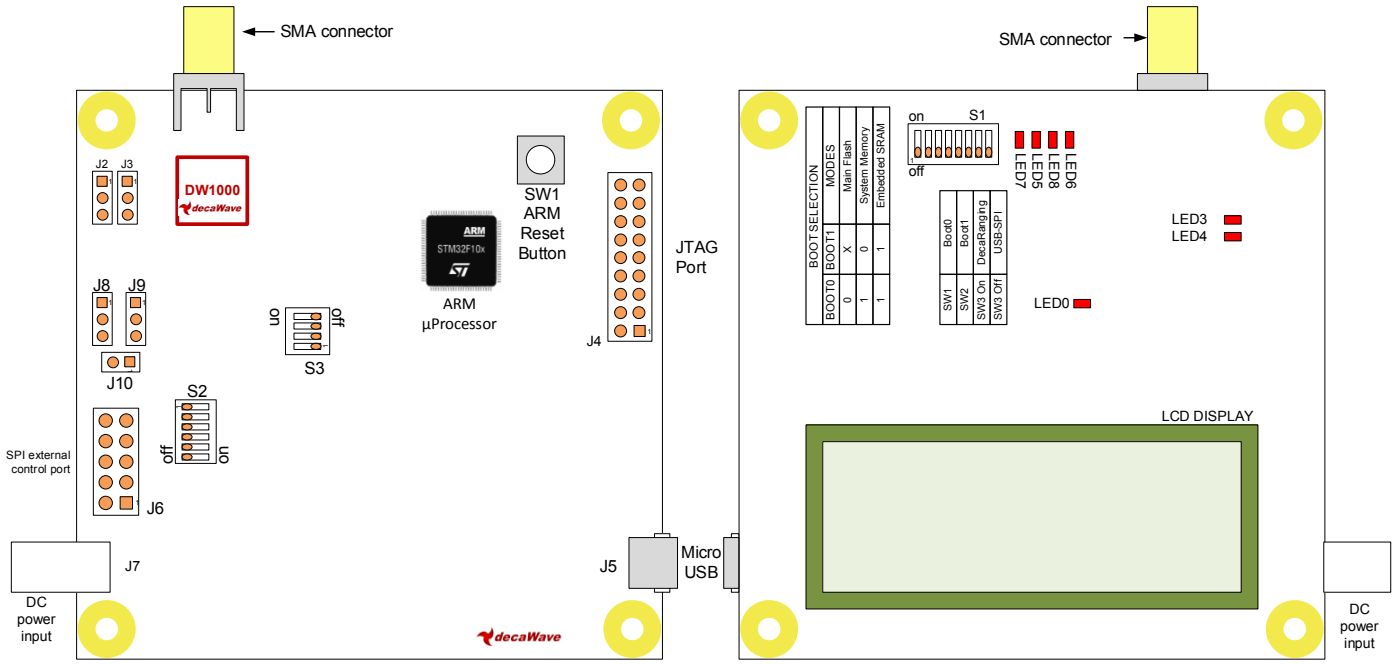
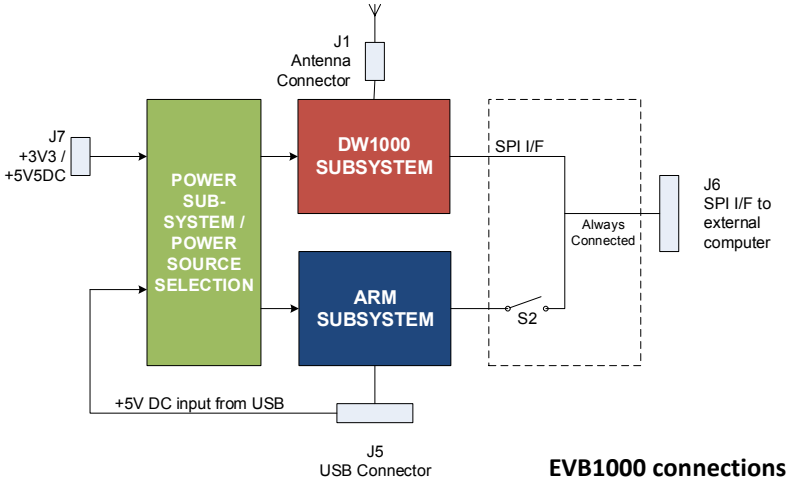


COMPONENT SIDE **DISPLAY SIDE**

Technical Data

- Supports all features of the DW1000 IC including: -
  - 6 frequency bands supported with centre frequencies from 3.5 GHz to 6.5 GHz
  - Tx power −14 dBm / −10 dBm
  - Tx power density −41.3 dBm / MHz
  - Preamble Length 64 µs to 4 ms
  - Packet Sizes up to 1023 bytes
  - SPI interface
- Power Supply Options
  - 5 V from USB
  - 3.3 V via 2-pin header
- DW1000 sub-system power consumption can be measured independently
- STM32F105 ARM Cortex M3 processor
  - 12 MHz external crystal
  - 32.768 kHz RTC crystal
  - On-chip USB interface / SPI interface to DW1000
- 70 mm x 70 mm PCB



EVB1000 connections

- 2-Line LCD ASCII character display
  - Displays measured distance when running DecaWave's "DecaRanging" software
  - Can be used for customer programs
- Hardware & software applications material available from DecaWave

To find out more contact: sales@decawave.com