



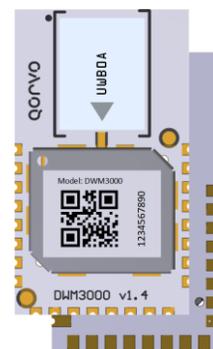
DWM3000

Fully integrated UWB transceiver module

Product Overview

The Qorvo® DWM3000 is a fully integrated Ultra-Wideband (UWB) transceiver module based on the Qorvo® DW3110 IC. It integrates antenna, all RF circuitry, power management and clock circuitry in one module simplifying integration. It can be used in 2-way ranging or TDoA location systems to locate assets to a precision of 10 cm and supports data rates of up to 6.8 Mbps.

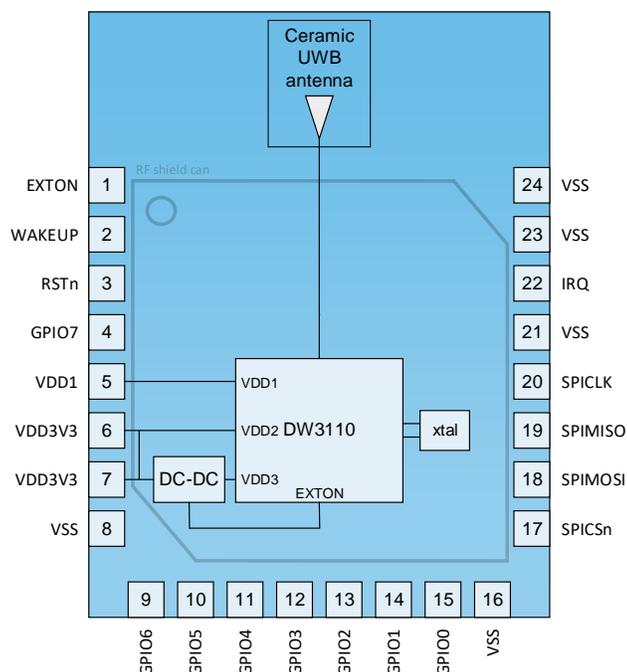
The DWM3000 is designed to be compliant to the FiRa™ PHY and MAC specifications enabling interoperability with other FiRa™ compliant devices.



24 Pin 23x13 mm side castellated package



Functional Block Diagram



Top View

Key Features

- IEEE 802.15.4-2015 and IEEE 802.15.4z BPRF compliant
- Fully aligned with FiRa™ PHY, MAC and certification development
- Supports UWB Channels 5 (6.5 GHz) and 9 (8 GHz)
- Programmable transmitter output power
- Fully coherent receiver for maximum range and accuracy
- Designed to comply with FCC & ETSI UWB spectral masks
- Supply voltage VDD3V3: 2.5 V – 3.6 V
VDD1: 1.62 V – 3.6 V
- Low power consumption
- Data rates of 850 kbps, 6.8 Mbps
- Maximum packet length of 1023 bytes for high data throughput applications
- Integrated MAC support features
- SPI interface to host processor
- Pin and pitch compatible with the DWM1000

Applications

- Precision real time location systems (RTLS) using two-way ranging or TDoA schemes in a variety of markets
- Location aware wireless sensor networks (WSNs)

Ordering Information

Part Number	Description
DWM3000SB	5 pcs bag
DWM3000SQ	25 pcs bag
DWM3000SR	100 pcs on a 7" reel
DWM3000TR13	500 pcs on a 13" reel
DWM3000EVB	Evaluation board



Revision History

Revision	Description
A	Initial product release

Contact Information

For the latest specifications, additional product information, worldwide sales and distribution locations:

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