# **UWB SR040 Module**



## **Sunway SW-M1000-SR040**

- A FiRa and IEEE 802.15.4z UWB compliant wireless transceiver module based on NXP's SR040 SoC
- Integration of SR040 SoC, embedded antenna, power management and clock control simplifies design integration – no RF design required
- Short packet durations support high tag densities
- Operation from self-managed managed coin cell battery/capacitor combination

#### **Target Applications**

Precision real time location system (RTLS) using two-way ranging (TWR) or TDOA schemes in a variety of applications such as:

- Consumer Tags or Wearables
- Industrial
- Healthcare
- Smart Retail Asset Tracking
- Smart Home Products

FCC/CE-Certified

#### SW-M1000-SR040

Integrated Tx/Rx switch
Built-in onboard antenna
Channels 5,6,8,9
13 x 24 x 2.2 mm
Easy integration

Items	Specifications
Main Chip	NXP Trimension SR040
UWB Channels	CH 5 & CH 9
Frequency Range	6.24 GHz - 8.24 GHz
Max Output Power	+10 dBm
Ranging Mode	TWR, TDoA
Antenna Connector Type	JSC
Communication Interface	SPI
Supply Voltage	1.8 V - 3.6 V

Sunway is a proud member of the UWB association FiRa.



### Sunway Modules are Based on NXP's Trimension™ SR040 and SR150

- Sunway UWB modules integrate clock circuit, RF circuit and power management that conform to the IEEE 802.15.4z HRP UWB standard
- PHY and MAC conform to the FiRa Consortium specification
- Integrated Time-of-Flight (ToF), Time-Difference of Arrival (TDoA), Angle-of-Arrival (AoA)
- High Precision RTLS, Real-Time Location System (TDOA and AoA)

