true sense

The first UWB module meshing Ranging & Radar capabilities

REGISTERED PARTNER NXP

fira MEMBER
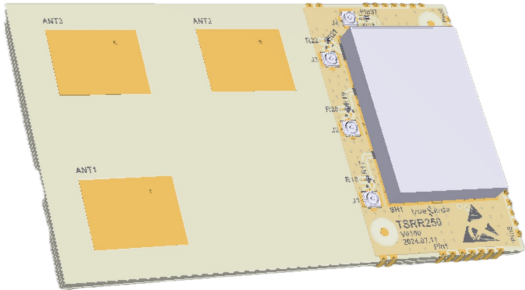
Secure Ranging

Radar Sensing

3D AoA, TDOA, RTLS

TSRR 250 UWB MODULE Ranging & Radar all in One

TSRR250 is based on **NXP Trimension™ SR250, with 3 embedded PCB Antennas +1 Radar antenna,** power management, clock control, BPF filter and peripheral components.

TSRR250 module is a **3D AoA solution without extra-antenna overhead**, no phase/amplitude skew, no SPST insertion loss and low-cost design.

TSRR250 supports **Radar** processing algorithm enabling **Presence Detection** & **2D pre- processed CIR streaming** allowing **advanced ML/AI applications.**

BENEFITS

No RF design required;

Range precision: +/- 5 cm distance & 3° of angle;

Advanced Radar sensing with ML/AI applications such as:

Breathing & Apnea Monitoring;

Fall Detection;

Behavior Analysis;

It supports 360° for 2 Way Ranging thanks to its **3 connectors** for a **7 antennas kit add on.**

TECHNICAL SPECIFICATION

ANTENNA TYPE	On board
ANTENNA NUMBER	3+1
RADAR MODE	OCPD,CIRs & Off CRP
RANGING MODE	ToF, 3D AoA, TDOA, RTLS
SIZE	55x32x4.3mm
INTERFACE	SPI
MAIN CHIP	NXP Trimension™ SR250
CHANNEL	UWB CH 5 & 9
FREQUENCY RANGE	6.24GHz~8.24GHz
SUPPLY VOLTAGE	1.62V ~ 1.98V