

IWRL6432AOP Overview

60GHz low cost, lower power industrial radar



Smart home/buildings

Automated lighting
Video doorbells
Smart appliances
Smoke alarms



Industrial robots

Manufacturing
Safety guards



Mobile robots

Order picking
Inventory delivery
Lawnmowers

Automated entrance

Indoor applications
Commercial doors
Industrial gates



IWRL6432AOP Low power radar USE-CASES

Level sensing

Fluid / solid level transmitter



Health/safety

Patient (people) detection
Position & vital signs



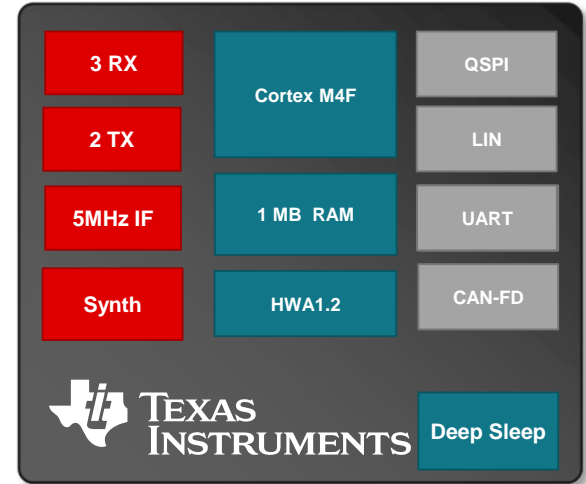
Personal electronics

Notebook / PC
Wearables
TV / speakers
Conference audio

IWRL6432AOP | Product overview

Designed for **small form factor**, **low BOM** cost and **lower power** applications

- **Integrated transceivers** : 3 Rx and 2 Tx
 - Using MIMO and FMCW technologies
- **Integrated frequency synthesizer**: 57GHz to 64GHz
- **Processing**:
 - Programmable Arm® Cortex®-M4F MCU @ 160MHz
 - Full RF chain integrated FFT, CFAR-CA HWAs
- **Memory**: 1.0 MB SRAM
- **Interfaces**: SPI, UART, I2C, QSPI, GPIOs
- **Detection range**: 15m at FOV edges (20m at boresight) for human
- **Field of view**: Az: +/-70, El: +/-60
- **Angular resolution**: Az: 29 degree, El: 58 degree
- **Antenna on Package (AoP)**: Single patch 3 Rx / 2Tx antenna integrated on to the package
- **Package**: 6.7 x 10.9 mm antennae on package (0.5mm pitch)



IWRL6432AOP Start Now!

Order an evaluation module

- Full system PCB
- USB connection
- Easy evaluation



IWRL6432AOP EVM

Visit TI resource explorer

- Application examples
- Getting started
- User guides



dev.ti.com/explore

Download the SDK

- Processing chain examples
- Driver examples



MMWAVE-L-SDK

Ask a question on E2E

- Get information and support direct from TI engineers
- 24 hour response



www.e2e.ti.com