# KaiKuTeK 🛛 🚇 JMicron

The world's first SoC integrated 60GHz mmWave radar, deep learning algorithms and Al accelerators for hand gesture recognition application.

Low power consumption, Low latency, High resolution, and Small form factor



## K60168-PBBA

## SoC Key Feature

- MCU: ARM® Cortex™-M0 core
- 32-bit hardware multiplier
- 40MHz Clock rate
- Integrated mmWave transceiver, baseband, radar DSP, AI accelerator, DC/DC, and PMU
  Antenna in package (AiP) design
- 1T3R
- External 8Mbits 3.3V flash, QSPI
- Support I2C or UART\*1/GPI0/SPI\*2
- Build-in temperature sensor
- 6.5\*6.0\*1.6mm

### Gesture Control Feature

- Operation distance 1 ~ 30 cm
- FOV +/- 30° 3dB beamwidth
- Gesture Recognition (accuracy > 95%)
- Object tracking, support 1D to 3D position tracking
- Provides pre-trained gestures

#### **Product Description**

K60168-PBBA is a Hand Gesture Recognition SoC using 60GHz millimeter-wave Radar and Al accelerator. This SoC has 1 transmit antenna and 3 receive antennas which are integrated on top of a 6.5 x 6mm package. K60168-PBBA is also able to perform 1D, 2D, and 3D position tracking. As it stands, it can be used in numerous smart wearable devices such as headphones, TWS, smartwatch, smartglasses and AloT applicaitons such as smart home, gaming, smart building, etc. as Human-Interface devices.

#### **Block Diagram**







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