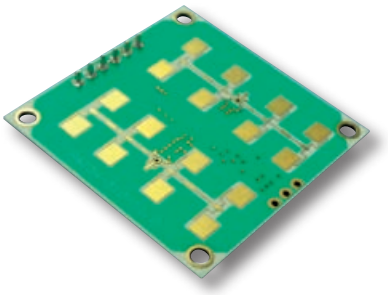
K-BAND DISTANCE MEASUREMENT SENSOR MODULE

The NJR4234BV is a sensor module that can measure the distance to a moving object such as a pedestrian more than 30 m ahead and incorporates a 24 GHz band microwave circuit, antenna, and signal processing circuit in a low profile package of 38 x 38 x 4.2 mm.

As a sensor capable of distance measurement using microwave, it is possible to detect moving objects by innovative proprietary signal processing and also has the function to calculate and output the distance to the moving objects in indoor and outdoor environments. In addition, it has the unique algorithm to prevent radio interference, possible to use multiple sensors under the same location.

It can be used as a sensor front end with built-in primary signal processing for distance measurement. In addition, since it can be easily connected to other equipment via the UART interface, it can be used in a wide range of applications.



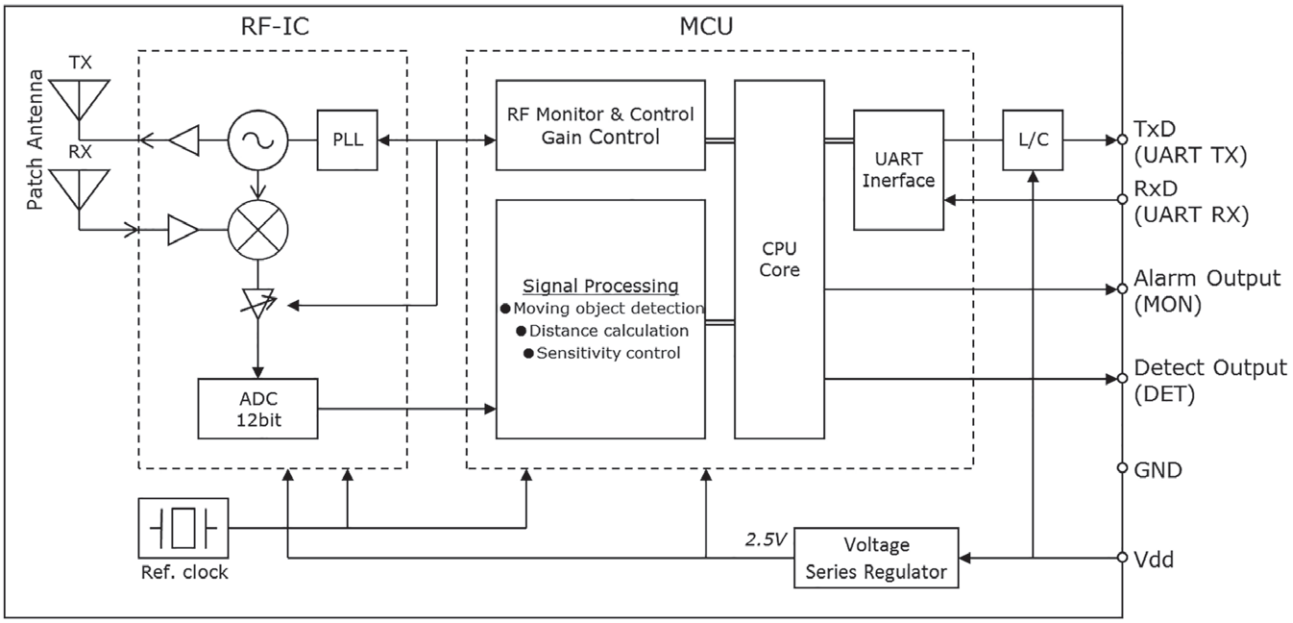
APPLICATIONS

Various equipment control by moving objects detection and measurement

- Security equipment
- Traffic control system
- Factory robot
- Industrial drone
- Parking management system

FEATURES

- Distance measurement sensor using the 24 GHz microwave
- Measurement distance of 30 m for a pedestrian[1]
- Antenna, Microwave RF circuit, Base-band IF circuit, MCU and also signal processing are integrated in a low-profile package
- Low-power-consumption
  37 mA @ 3.3 V power supply[2]
- Unique Signal Processing / Algorithm Installation
  - High sensitivity mobile object detection (Patented Technology)
  - Distance measurement signal processing
  - Automatic calibration and gain control
  - Radio interference prevention
- Adopted UART and digital CMOS output for interface
- Possible to be installed in indoor and outdoor locations
- Evaluation Kit available



[1] Distance measurement 30 m is based on evaluation results. It varies depending on the reflection intensity of the moving object.
[2] It is realized by intermittent operation and measurement repetition time. Please use the power supply circuit for the peak current.

Contact for information: Mr. Wolf · Tel.: +49(0)7452-6007-23 · e-mail: t.wolf@endrich.com