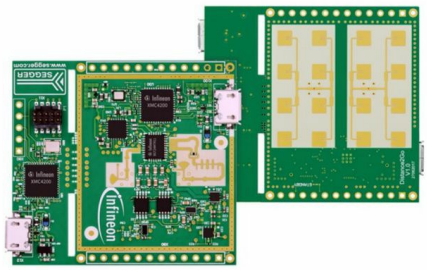

Distance2Go Development Kit

SKU 110060982

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This development kit allows the user to implement and test several sensing applications at the 24 GHz ISM band such as FMCW distance measurement, Doppler based movement Key features detection, Doppler based direction of movement detection, and Doppler based speed measurements of targets. The kit consists of the BGT24MTR11 transceiver MMIC and a XMC4200 32-bit ARM® Cortex®-M4 for signal processing and communication via USB.

Kit contains:

- 24GHz Demo board
- Info sheet
- SW GUI to operate kit
- Precompiled C libraries provided
- Source code (FW + basic radar algorithms)
- PCB schematic and gerber files

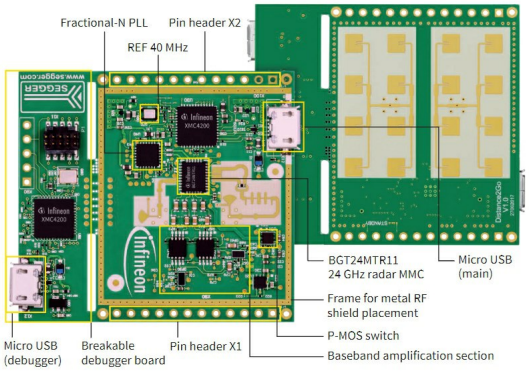
Summary of Features:

- Capability to detect distance of moving and static targets (Targets include humans)
- Capability to detect motion, speed and direction of movement (approaching or retreating)
- BGT24MTR11 - 24 GHz highly integrated RF MMIC
- XMC4200 ARM® - Cortex® - M4 - 32-bit industrial microcontroller (Requires external debugger)
- Integrated antennas

Target Applications:

- Drone landing assist
- Drone obstacle avoidance
- Smart home
- Building security
- Street lighting
- Industrial automation
- Tank level sensing

A block diagram of the demonstrator board is shown in the figure below highlighting all main board components. The board is already preprogrammed using Infineon's DAVE™ development tool. The module features a phased locked loop that is controlled with the XMC4200 to generate the FMCW ramps required for distance measurement. The MCU samples up to 2 IF channels of the transceiver chipset and communicates via USB interface to a connected PC. A provided PC application GUI (Windows XP/Vista/7/8) can be used to display and analyze acquired data in time and frequency domain. The GUI allows for the extraction of the radar time domain signals allowing for advanced debugging and algorithm development.



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