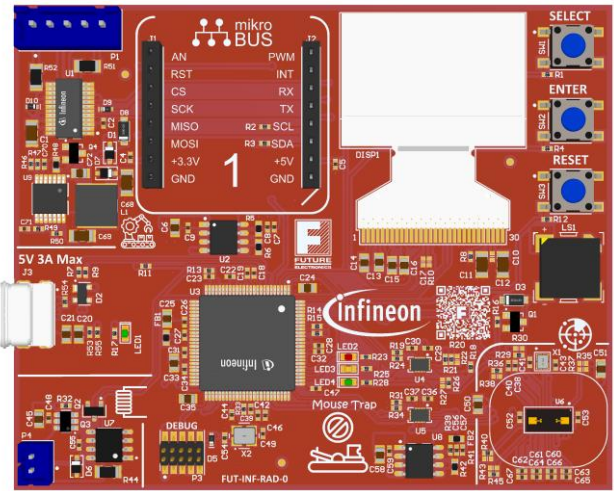


Mousetrap Demonstration Board

Overview

[Mousetrap](#) is a simple demonstration board designed by Future Electronics to demonstrate radar-based security monitoring applications in industrial, commercial or consumer markets. It features Infineon [XMC4500](#) industrial MCU, XENSIV 60GHz radar sensor chip ([BGT60LTR11SAIP](#)), along with Infineon PMICs (Power Management ICs) and stepper motor driver. The embedded firmware enables multiple modes controls, switching between Motion mode, Running mode, Trap mode and Auto Door mode, to make it easy for demonstration and application development.

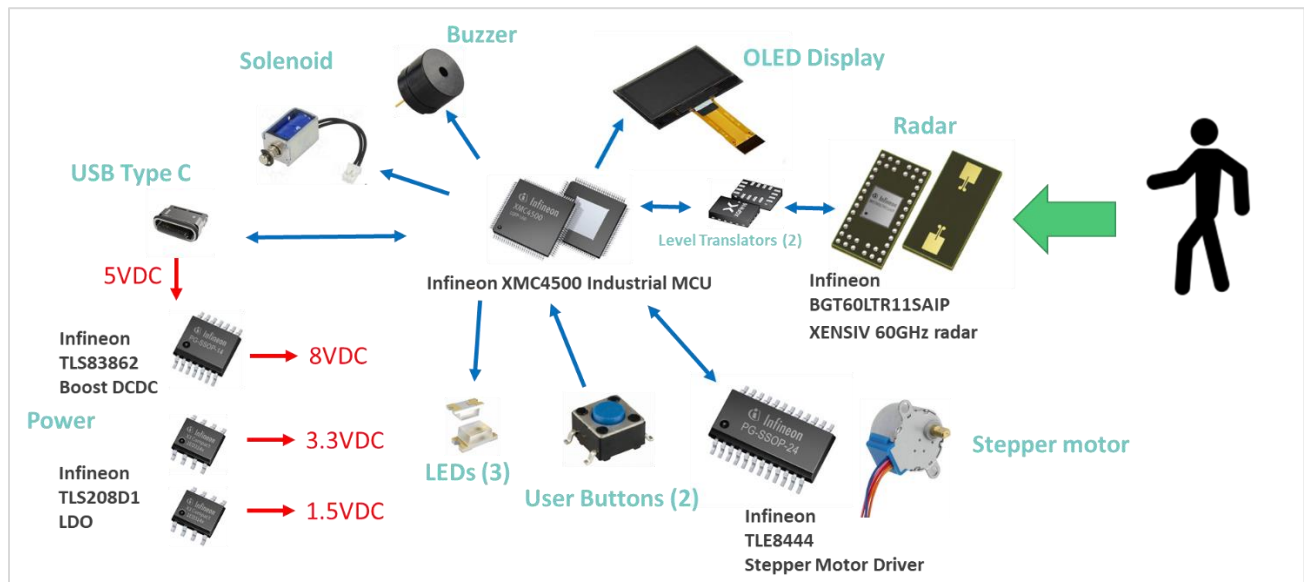


FUT-INF-RAD-0

Features

- Infineon industrial MCU ([XMC4500](#))
- Infineon XENSIV 60GHz radar sensor chip ([BGT60LTR11SAIP](#))
- Infineon Power Management ICs (PMICs)
 - Boost DC-DC ([TLE83862ELXUMA1](#))
 - LDO ([TLS208D1EJVXUMA1](#))
- Infineon Stepper Motor driver ([TLE8444SLXUMA1](#))
- 128x64 OLED display

System Block Diagram



Mousetrap Demonstration Board

Key Components

Function	Part Number	Description	Manufacturer
MCU	XMC4500F100K1024AC XQSA1	32-bit XMC4000 Industrial Microcontroller Arm® Cortex®-M4	Infineon
Sensor	BGT60LTR11SAIP	XENSIV™ 60GHz first completely autonomous radar sensor for motion sensing	Infineon
Motor Driver	TLE8444SLXUMA1	Protected Quad-Half-Bridge-IC for automotive and industrial motion control applications	Infineon
Power	TLS208D1EJVXUMA1	monolithic integrated linear voltage post regulator	Infineon
Power	TLE83862ELXUMA1	Low-side-sense boost controller with built in protection features	Infineon

Application Examples

- Radar based safety detection and monitoring systems in Industrial applications
- Radar based Occupancy detection or motion monitoring in commercial or consumer applications

