

# UNLOCK NEW POSSIBILITIES

*22kHz keyless entry solution doubles range to enable new applications*

Maxim's keyless entry solution is designed to give you the best transmission range possible. It utilizes the lowest available frequency (22kHz) to increase penetration through metal and other objects. This means you need fewer antenna coils to cover the field of access. You have more flexibility in where you place antenna coils. And you can detect the approaching driver sooner, enabling new user interface possibilities.

## Benefits of Maxim's 22kHz Solution

**Enables advanced user interface.** The extended transmission range gives you time to prepare the cockpit and car for the driver's arrival.

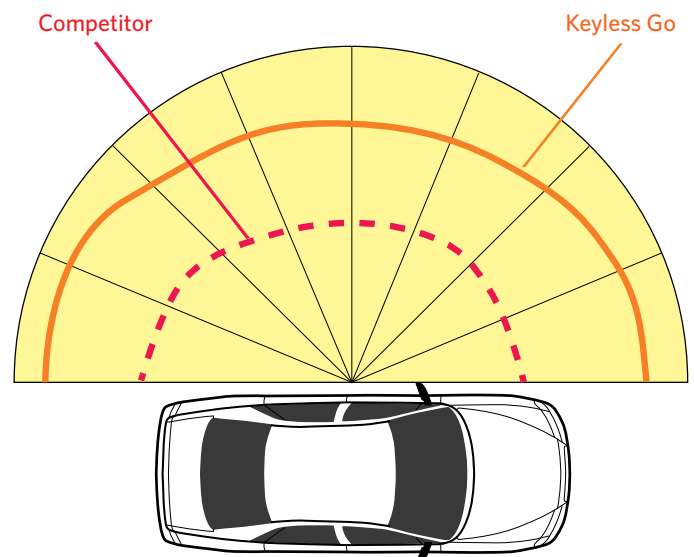
**Lowest system cost.** Use fewer antenna coils to cover the field of access while completely eliminating blind spots.

**Interference immunity.** Operation at 22kHz helps you avoid interference from mobile devices, LCD screens, and other automotive systems.

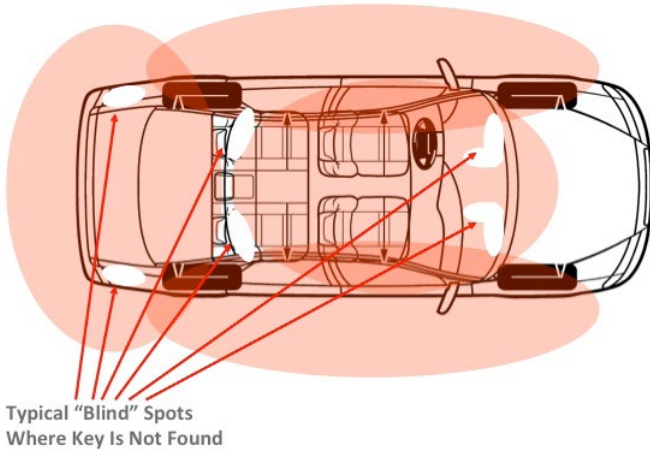
**Improved reliability.** Increased range lets you move the antenna coils out of the door handle to protected areas inside the door.

**Extended battery life.** Low-frequency operation reduces current consumption of both analog and digital circuitry.

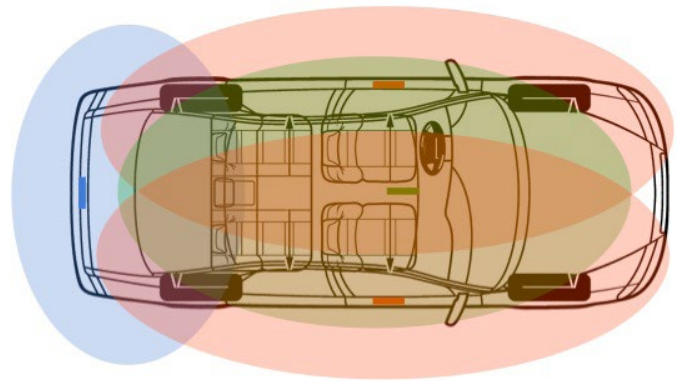
## 22kHz Extends Detection Range



Competitive Solution



Maxim's Solution



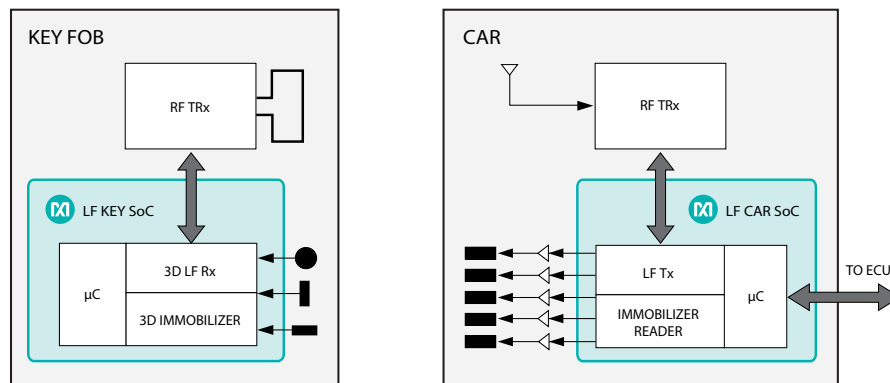
The competitor's system is plagued by blind spots where the key is not found. Maxim's 22kHz solution provides full in-vehicle coverage, so it doesn't matter which pocket, jacket, or bag the driver puts it in.

In addition to numerous performance advantages, Maxim's keyless entry solution gives you the benefit of integration. The key SoC includes a low-frequency receiver, 3D active immobilizer, and microcontroller. The basestation SoC includes a low-frequency transceiver, immobilizer reader, microcontroller, door handle interface, and antenna diagnostics.

The active immobilizer allows the driver to start the car when the battery in the key fob is dead. Integrating this function in the SoC saves you the cost of an immobilizer reader circuit and coil.

Maxim's integrated solution is built to operate autonomously, only communicating high-level commands to the ECU. This improves response times, and lowers the power consumption and computation load of the ECU.

Offering the best performance, lowest system cost, and highest integration, Maxim's keyless entry is the clear choice for your keyless entry application.



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