

# Driving Industrial Markets with TI's Dual-mode Bluetooth® Module

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What do you think of when you hear *Bluetooth*®? Headphones that stream music using Bluetooth or fitness step trackers that send wireless data to your phone? How about industrial use cases? As Bluetooth grows and develops it is expanding into more spaces, not only audio and phone data, but in areas where their reliability and robustness is vital. Our new dual-mode Bluetooth module with its low power, flexibility and easy-to-use features provides a solution for a wide range of applications that are ideal for industrial devices. TI's dual-mode Bluetooth module ([CC2564MODA](#)) with integrated antenna will provide easy integration into most equipment, existing or new, allowing industrial devices of varying power and data requirements to go wireless and expand with the latest technologies.

## 1. Need to Make Wireless

Having wires and cables for data transfer, and multiple equipment connections in high traffic and/or difficult to reach areas creates a large risk and can be expensive. By providing data from devices and products wirelessly the number of connections in an area is greatly reduced lowering the risk of accidents, increasing mobility and distance, and reaching areas cables physically can't fit into easily. Our dual-mode Bluetooth ([CC2564MODA](#)) module provides one of the best RF performances and can be used to replace cables in industrial where its reliable and robust communication and fast connection make it an ideal connectivity solution. The module also has the ability to connect to multiple wireless links across long ranges with a TX power up to +10dBm and -93dBm RX sensitivity permitting multiple devices to be controlled and connected to a remote device such as tablet or phone.

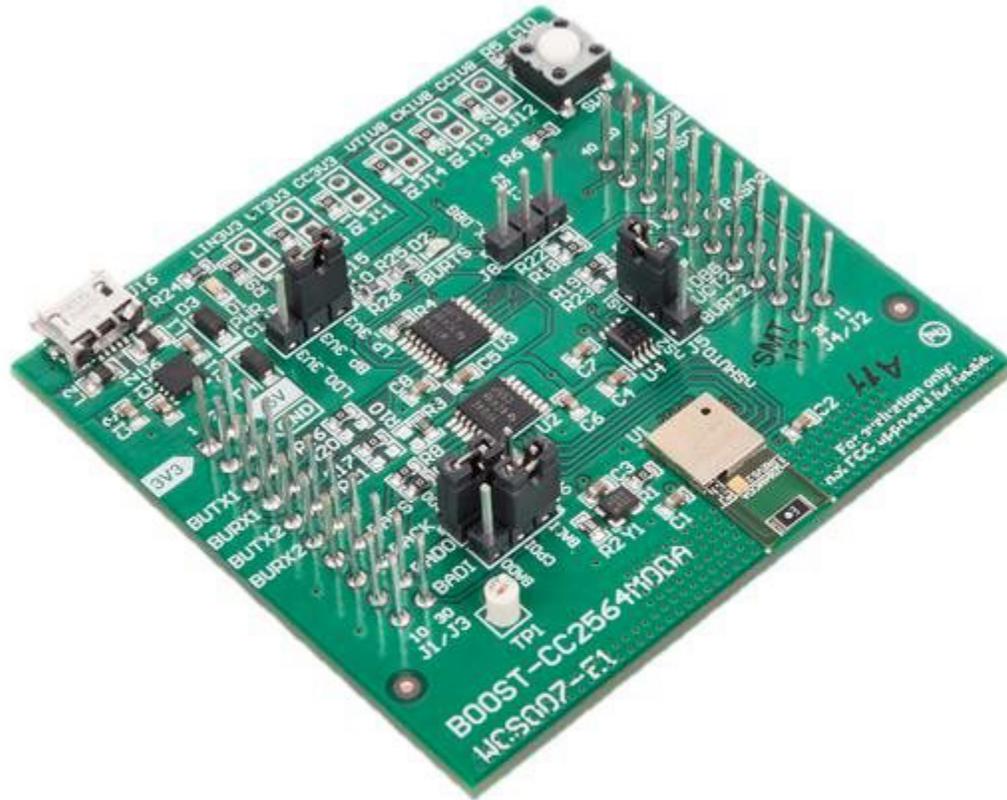
## 2. Different Data and Power Requirements

When working in large markets such as industrial fields, the equipment varies in the amount of data that needs to be delivered as do the battery life needs of the device. Diverse equipment needs like these create a challenge in transitioning to wireless equipment that will fit the application's purpose when integrating them into the current network. TI's dual-mode Bluetooth module can work in either classic Bluetooth or Bluetooth low energy modes depending on the task and function the device needs to perform. The dual-mode capability also provides an option to connect to latest as well as legacy and existing remote devices which may not support Bluetooth low energy connections. This means that the module can be used in almost all wireless industrial equipment, regardless of their Bluetooth need, allowing for a seamless integration into the current network. The modules power management for extended battery also makes it efficient in the industrial markets where there is a heavy reliance on long-lasting battery life.

## 3. Difficult to Change Systems

In industrial fields the equipment performs tasks that are often critical. Changing the entire existing systems to become wireless is often difficult and expensive with the high cost of certification as well as difficulty in integrating most wireless systems. Since Bluetooth is non-proprietary and universal, TI's dual-mode Bluetooth module ([CC2564MODA](#)) is easy to setup and integrate into most industrial networks. The device also has the antenna integrated into the module so that it is highly optimized for design into small form factor systems and requires minimal or no RF hardware design experience. The module is Bluetooth 4.1 certified (FCC, IC and CE) and Bluetooth 4.1 controller subsystem qualified (QDID 64631), compliant up to the HCI Layer, providing a fast and easy installation.

The flexibility, quick to market, certified dual-mode Bluetooth module (CC2564MODA) with integrated antenna is an advanced Bluetooth solution that will increase the markets where wireless connectivity devices can be used. The Bluetooth movement into industrial markets will improve the equipment in those areas, with this module eliminating many of the current challenges faced in these fields. Start evaluating your design today with our new [dual-mode Bluetooth CC2564 BoosterPack™ plug-in module with integrated antenna](#) and the [MSP432 microcontroller LaunchPad™ development kit](#) today. With the rapid expansion Bluetooth is making into new areas that, what market do you think will Bluetooth change next?



## *Dual-mode Bluetooth CC2564 module BoosterPack plug-in module*

### **Additional Resources**

- [Buy now](#): Dual-mode Bluetooth module with integrated antenna BoosterPack plug-in module
- [Learn more](#) about the design advantages of our dual-mode Bluetooth module
- [Download](#) the TI dual-mode Bluetooth Stack on MSP432 MCUs
- [Download the datasheet](#) for our dual-mode Bluetooth module with integrated antenna

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