Developing with Multiple Protocols
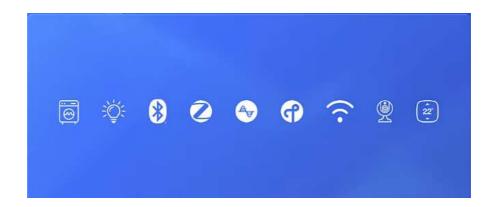
Developing with Multiple Protocols

Many connected devices can improve consumer experience and enhance functionality by supporting multiple wireless connectivity options. We are used to our smartphones supporting Bluetooth, Wi-Fi, and other connectivity options to provide streaming media as well as connectivity to headphones and smart watches. The power, size, and cost requirements for many IoT systems has traditionally made supporting multiple protocols challenging. Dynamic multiprotocol wireless connectivity provides a viable means to simultaneously support multiple wireless protocols on a single chip by using a time-slicing mechanism to share a radio between protocols, reducing wireless system cost and simplifying system design.

These pages provide information about developing application that use more than one Silicon Labs-supported protocols. Topics covered include developing dynamic multiprotocol and concurrent multiprotocol applications as well as improving protocol coexistence with Wi-Fi.

For details about multiprotocol support in this release: Multiprotocol release notes are included in Bluetooth, Zigbee, and OpenThread release notes. Links to release notes are available on the silabs.com Gecko SDK page.

For Silicon Labs' Multiprotocol product information: See the product pages on silabs.com.

For background about multiprotocol development: The Fundamentals section is a good place to start. It provides background on protocol coexistence as well as the basics of multiprotocol development.