## Qualcomm

# Qualcomm® CSR102x Bluetooth Node Development Kit

Small form factor, multi-purpose development kit for designing Bluetooth® low energy IoT applications

Small form factor design with integrated motion sensor, indication LED and button suitable for making tag applications a reality.

The Bluetooth Node Development Kit features a compact, integrated board for designing and prototyping Bluetooth low energy applications such as beacons, proximity tags and wearables such as footpods.

The Bluetooth node target board, operated by a coin cell battery, includes the CSR1024 SoC with internal flash, a chip antenna, motion sensor, indication LED, button and programming connector, all in a compact design. External flash is also available on the board for additional capacity. For programming purposes, the Bluetooth node board can be connected with the CSR102x Starter Development Kit, IoT Development Kit or the Professional Development Kit, all of which provide access to the SDK.

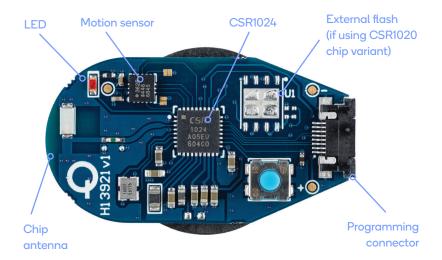
The CSR102x product family is optimized for IoT applications including wireless remote controls, sport watches, home automation solutions, and beacons. Where balancing performance, battery life, and cost is critical, the CSR102x products bring extensive and flexible I/O capabilities designed to simplify integration and eliminate expensive interface components.

There are a variety of development options available for the CSR102x platform for virtually all types of Bluetooth low energy applications. Kits are available to purchase online from our sales and solution providers including our network of distributors, representatives, module suppliers and design houses.

#### **Kit Contents**

- Bluetooth node target board
- Setup guide
- Access to SDK is not included with this kit

## **Bluetooth Node Target Board**



- Factory-fitted with fully featured CSR1024 SoC
- Coin cell battery operated
- Integrated motion sensor, indication LED and button
- Simple setup, east to use, with a low learning curve





#### **Bluetooth Low Energy Node Applications**

- Footpods
- Fitness Trackers
- Smart Tags
- Smart Watches
- Beacons



#### CSR1024 SoC

#### CSR1024C04-ILLP-R

- All purpose, upgradeable platform
- 15x GPIO
- 1x AIO
- 80KB RAM; 256KB internal flash
- LGA 36-lead package
- 5 x 5 x 0.65mm; 0.5mm pitch
- Pin compatible with CSR1020

## Ordering Information

Product	Part Number
Bluetooth Node Dev Kit	DK-CSR1025-10284
CSR102x Starter Dev Kit	DK-CSR1025-10285
IoT Dev Kit	DK-CSR1025-10280
Professional Dev Kit	DK-UENERGY-PB-10242
Sport Watch Application Board	DB-UENERGY-AB-10244
Smart Remote Application Board	DB-UENERGY-AB-10243

# To learn more visit: qualcomm.com or developer.qualcomm.com

## Qualcom

## Other CSR102x Development Kits

#### **IOT** Development Kit

DK-CSR1025-10280

The IoT development kit introduces a multi-purpose development platform for prototyping a range of IoT applications and is intended for use with Bluetooth mesh and  $CSRmesh^{TM}$  SDKs.

#### **Applications:**

- Lighting
- Home automation
- Sensor networks

## PROFESSIONAL Development Kit

DB-UENERGY-PB-10242

A development kit based on a modular design that allows the processor to be swapped out via a pluggable module. The target board can be run from different power sources, and current can be measured from the board directly.

#### **Applications:**

- Auto keyless entry
- Fitness & Health
- Keyboards & mice
- Beacons
- Alert tags

## CSR102x STARTER Development Kit

DK-CSR1025-10285

A simplified, yet comprehensive kit designed for developers and designers who need to get prototypes of their Bluetooth low energy products up and running and into production with reduced development time.

#### **Applications:**

- Heart rate sensor
- Security tag

## SPORT WATCH Application Board

DB-UENERGY-AB-10244

Pluggable sport watch application board that includes NFC with payment support, GPS and multiple sensors.

#### **Applications:**

Wearables

# SMART REMOTE Application Board DB-UFNFRGY-AB-10243

Pluggable smart remote application board that includes a a microphone, IR transmitter and receiver, touchpad, motion sensor and other peripherals.

#### **Applications:**

Accessories

#### **SDK**

The Bluetooth low energy SDK provides a comprehensive graphical code development environment for the CSR102x IC products using its xIDE environment with breakpoint, variable viewing, memory viewing, etc.

The SDK is based on a gcc compiler tool chain with command line build and make tools available, designed for reducing development time and regression builds.

CSRmesh, Sport Watch Application Board and Smart Remote Application Board are products of Qualcomm Technologies, Inc. and/or its subsidiaries.

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