



Push every boundary.™

CSR μEnergy® Development Kits

Bluetooth® Smart Single Mode Solution



Product Overview

CSR is the industry leader for Bluetooth Smart, enabling Bluetooth Smart devices to transfer simple data sets between compact devices thereby opening up a whole new class of Bluetooth applications such as keyboards, mice, medical sensors, fitness training equipment, watches, TV remote controls, automotive keyless entry, advertising, indoor location, smart energy appliances and proximity tagging.

Bluetooth Smart takes less time to make a connection and consumes approximately 20 times less power than classic Bluetooth.

CSR μEnergy platform provides a built-in processor to run the customer application as well as the qualified Bluetooth 4.0 single-mode stack and radio. The platform has been optimised for easy development and low cost designs with minimal external components. Both chip variants can run directly from a 3V coin cell, and connect directly to a PCB antenna.

Product Highlights

- Bluetooth 4.0 (Single mode Bluetooth Smart)
- +7.5dBm Bluetooth LE Maximum Tx output power
- -92.5dBm Bluetooth LE Rx Sensitivity
- 128KB memory: 64KB RAM and 64KB ROM
- 50Kbytes of user App space
- Support for LE host stack incl. ATT, GATT, SMP, L2CAP, GAP
- RSSI monitoring for proximity applications

Two product variants:

- CSR1010™ - QFN 32 lead, 5 x 5 x 0.6mm package
- CSR1011™ - QFN 56 lead, 8 x 8 x 0.9mm package

CSR offers a comprehensive ecosystem of hardware and software components to help with rapid device development including:

- CSR BlueCore® CSR8510™ Bluetooth 4.0 solution
- Reference design for modules



Applications

Human Interface Devices including:

- Keyboard
- Mouse and touchpad
- Remote control

Sports and Fitness devices including:

- Heart rate monitor
- Foot pod
- Cycle speed, power and cadence

Health devices including:

- Glucose meter

CSR μ Energy[®] Development Kits

Bluetooth[®] Smart Single Mode Solution

CSR μ Energy Development Kits

Each kit comprises:

- CSR μ Energy Development Board
- CSR μ Energy USB to SPI Adapter
- USB Bluetooth Dongle
- CSR μ Energy Software CD-ROM

CSR1011 Development Kit

For general purpose development and keyboard or remote control applications:

- Kit part number: DK-CSR1011-10138
- Board part number: DB-CSR1011-10139

CSR1010 Development Kit

For constrained health, sports and fitness applications:

- Kit part number: DK-CSR1010-10136
- Board part number: DB-CSR1010-10137



USB to SPI Adapter



DB-CSR1011-10139



DB-CSR1010-10137

CSR μ Energy Platform Software

CSR provides development tools for Windows XP and Windows 7 32-bit/64-bit:

CSR μ Energy[®] Software Development Kit (SDK)

- Profile and peripheral application examples
- xIDE for CSR μ Energy
 - Compiler and debugger tools

CSR μ Energy[®] Tools

- Production test firmware
- Production configuration libraries and utilities

Note: Evaluation tools for Mac OS are available on CSR support



Ordering Information

Visit the website www.csr.com for a [list of distributors and representatives](#) [Contact > Sales Representatives] or request [more information](#) from a CSR representative [Contact > CSR Customer Support]. Visit the website for further information on other related products.

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