

Operational Description

The CC2533 is an optimized system-on-chip (SoC) solution for IEEE 802.15.4 based remote-control systems. It enables single-chip remote controls to be built with low bill-of-material cost when used as a flexible SoC. It also provides a simple path to adding RF4CE capability to a device or target when used in the wireless network processor configuration of the RemoTI™ RF4CE stack. Robust network nodes can be built with very low total bill-of-material costs.

The CC2533 combines the excellent performance of a leading RF transceiver with a single-cycle 8051 compliant CPU, up to 96-KB in-system programmable flash memory, up to 6-KB RAM, and many other powerful features. The CC2533 has efficient power modes with RAM and register retention below 1 μ A, making it highly suited for low-duty-cycle systems where ultralow power consumption is required. Short transition times between operating modes further ensure low energy consumption.