



## SRFKE1 / SRFKE1C SCI CORE BLUETOOTH RADIO



Package Size: 6mmx6mm 36pins QFN  
5mmx5mm 32pins QFN

### FEATURES:

- Bluetooth qualified for both 1.1 & 1.2
- Fully integrate Bluetooth front-end
- Allows for efficient power control and communication with Bluetooth class 1 devices
- BlueRF using the RXMODE2 configuration
- Automatically adapt to the voltage levels used by different baseband controllers
- 6 x6 mm 36pins, 5x5 mm 32pins QFN package
- Meets RoHS requirements for hazardous substances

### BENEFITS :

- Low component count
- Low profile implementation

### APPLICATIONS:

- 2G, 2.5G and 3G handsets
- PDA's
- Notebook PC's
- Computer peripherals
- Office network equipment
- Home applications

The SCI Core Bluetooth Radio **SRFKE1/ SRFKE1C** is a part of SCI's 4th generation Bluetooth solutions designed for use with short-range wireless applications.

The radio integrates a complete Bluetooth class 2 transceiver, operating in the ISM frequency band, 2.4 – 2.5 GHz. The modulation is Gaussian Frequency Shift Keying, GFSK, with a BT product of 0.5 and a modulation index ranging from 0.28 to 0.35. Fast frequency hopping (1600 hops/s) is used over a total of 79 channels between 2.402 GHz up to 2.480 GHz. The channel bandwidth is 1 MHz.

The macro-cell is designed in 0.18 $\mu$ m RF CMOS technology for small die size, high yield and low power consumption. It verified for compliance with Bluetooth Radio Specification v1.2. The Radio is used as the radio in SCI Bluetooth v1.1 and v1.2 IC. The Radio is also available as standard 36-pins & 32pins QFN package.

Other types of packaging are also possible.



SRFKE1 /SRFKE1C BLOCK DIAGRAM

