PRINCO

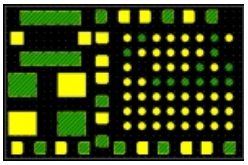
Bluetooth 4.0 Dual Mode SiP Module Specifications

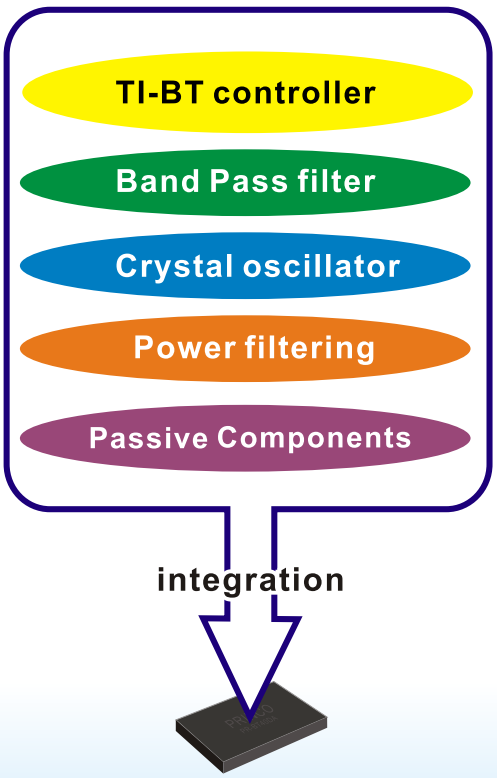
The miniature size Bluetooth 4.0 dual mode SiP module integrates TI-CC2564 BT controller, band-pass filter, crystal etc. Excellent RF performance (Tx: power +10 dBm; Rx sensitivity -93 dBm) are realized by using PRINCO's patented ultra high density substrate and advance packaging technology.

By using this SiP module, system design effort is reduced and fast time to market could be achieved. This module is particularly suitable for space-constrained application.

Target applications include:
Sports and fitness product, Smart phone/Tablet accessories, Remote Controller, Wireless data communication, Smart Toys.

Bluetooth 4.0 SiP Module
PR-BT40DA





Features and Benefits

High Performance with Low System Cost

- TI - CC2564 Bluetooth controller.
- TX: +10 dBm, RX:-93 dBm.
- Easy-to-use. (24-pin, 0.7 mm peripheral ball pitch)
- 2L-PCB design feasible.

Small Form Factor with High Reliability

- 4.2 x 6.5 x 1.20 mm
- Ideal for space-constrained handheld devices.
- Proven for industrial grade use. (-30℃ to 85℃)

Profiles supported

- Serial Port Profile (SPP).
- A2DP and more….
- BLE profiles include: GATT, ANP, HTP, HRP…
- Seamlessly integrated with TI ultra-low power MSP430 Microprocessor.

Electrical features

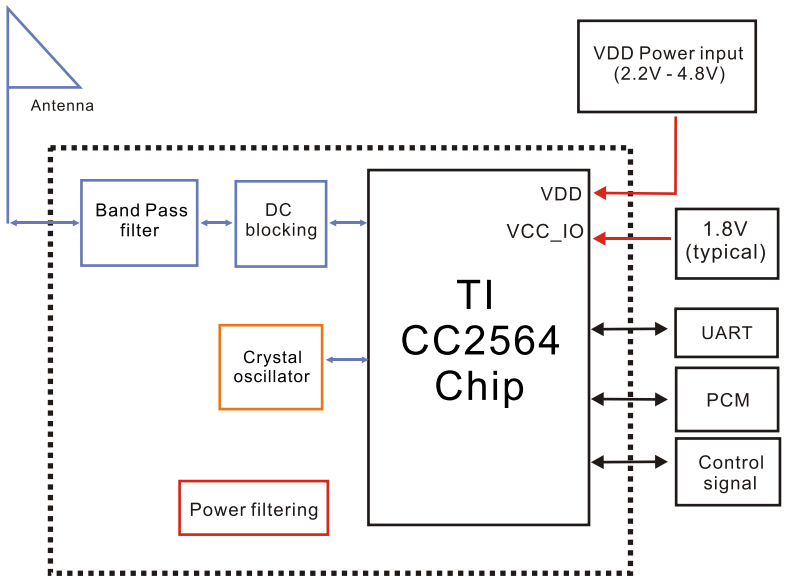
- UART, I2C, PCM interface.
- VDD: 2.2 - 4.8V.
- VIO: 1.8V (typical)
- Support Low Power mode. (Sniff, Deep sleep and power down)
- Reference design available.

Product Highlights and Specifications

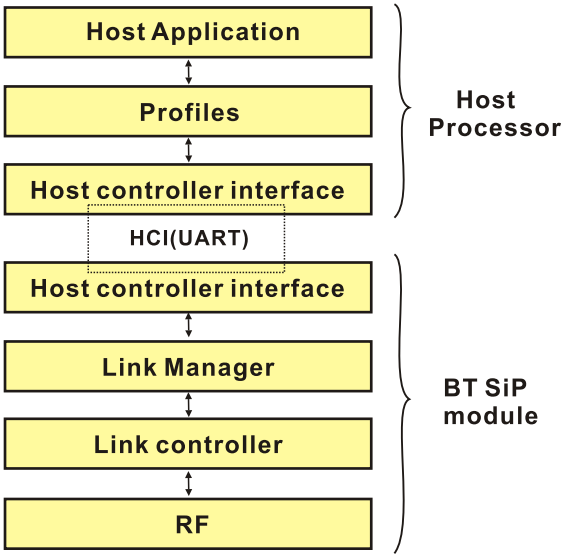
- ★ Extremely Small size: 4.2 mm * 6.5mm.
- ★ TI-CC2564 BT controller, crystal oscillator, band-pass filter included.
- ★ Bluetooth dual mode. Fully support 2.4GHz Bluetooth 2.1 + EDR and Bluetooth Low Energy Smart Ready radio.
- ★ Output power TX: +10 dBm; Receiver sensitivity Rx: -93dBm.
- ★ Single-ended 50-ohm antenna input.
- ★ Low power mode supported. (Sniff, Hold, Deep Sleep, Power Down).
- ★ UART /PCM/I2C interface supported
- ★ Operation voltage: VDD: 2.2 - 4.8V (Battery directly connected.) VDDIO: 1.8V (typical).
- ★ Various profiles supported: SPP, GATT, L2CAP, HTP, HRP? etc
- ★ Seamlessly stack integration with TI MSP430 MPU.

Note:Specifications might be changed without notice.

Bluetooth SiP block diagram



Software block diagram



巨擘科技股份有限公司
PRINCO CORPORATION
Tel: 886-3-5773177 Fax: 886-3-5779195
E-Mail: services@princo.com.tw