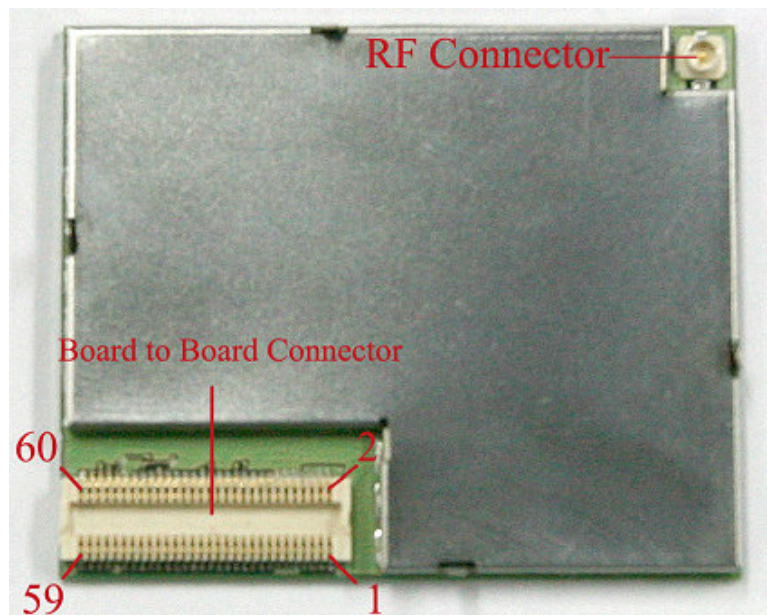


## Mounting SIM900B onto the application platform

Use the connector SUNCAGEY BB530-06001-20R to fix the SIM900B onto the customer platform



We recommend to use SUNCAGEY Company's BB530-06001-20R as the board-to-board connector. They are fully compatible each other. This high density SMT connector is designed for parallel PCB-to-PCB applications. It is ideal to use in VCRs, notebook PCs, cordless telephones, mobile phones, audio/visual and other telecommunications equipment where reduced size and weight are important. Following is parameter of BB530-06001-20R. For more details, you can login <http://www.suncagey.com> for more information.

### Mechanical dimensions of the SUNCAGEY BB530-06001-20R

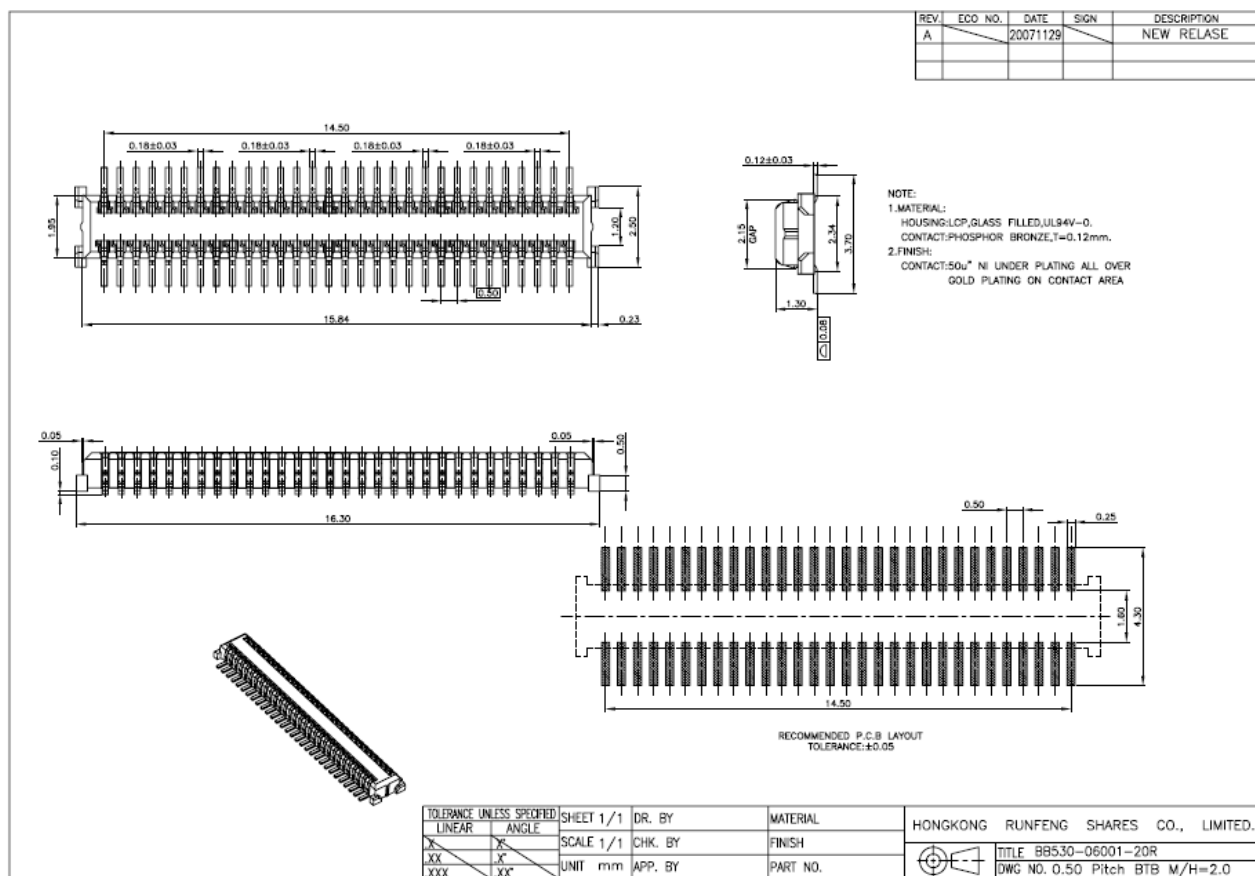
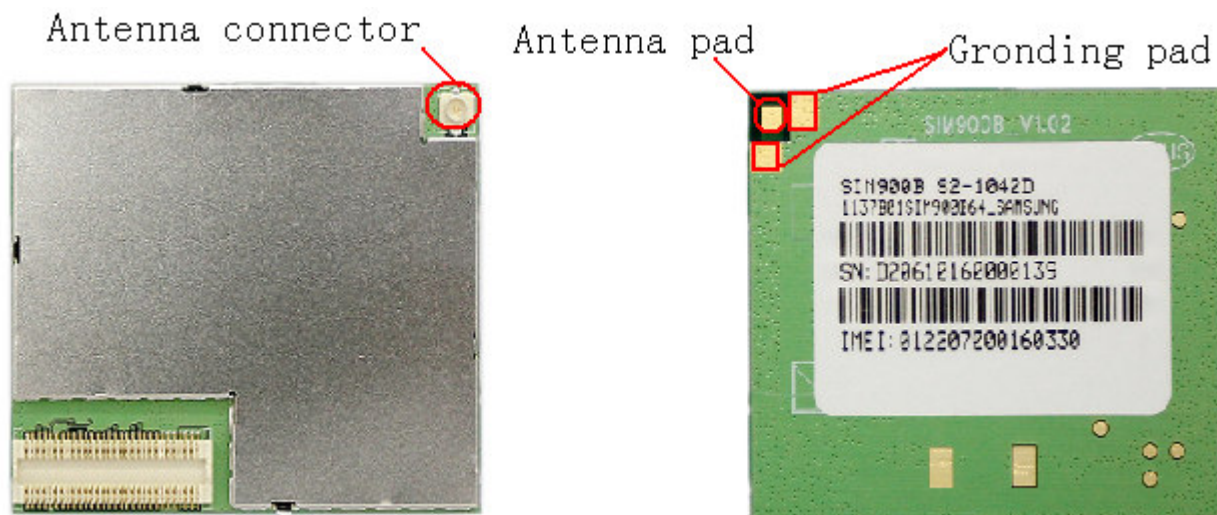


Figure 1: SUNCAGEY BB530-06001-20R board-to-board connector

### Antenna Interface

The RF interface has an impedance of 50Ω. To suit the physical design of individual applications, SIM900B offers alternatives:

- Recommended approach: antenna connector on the component side of the PCB
- Antenna pad and grounding plane placed on the bottom side.

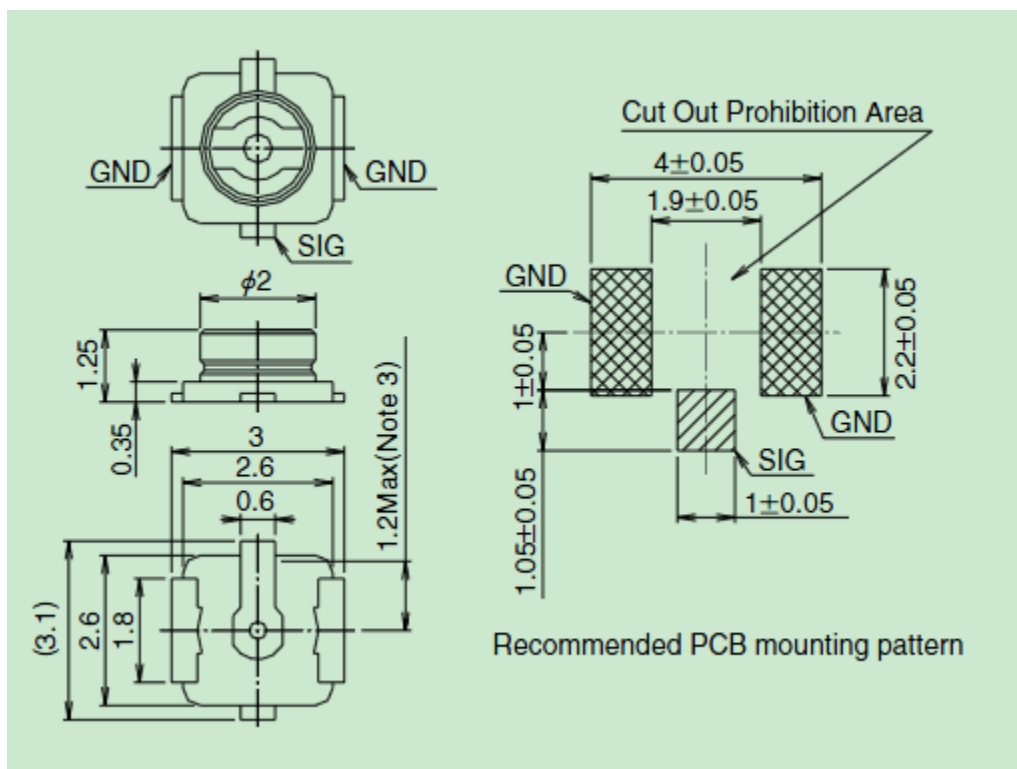


**Figure 2 : The RF interface of module**

The antenna can be soldered to the pad, or attached via contact springs.

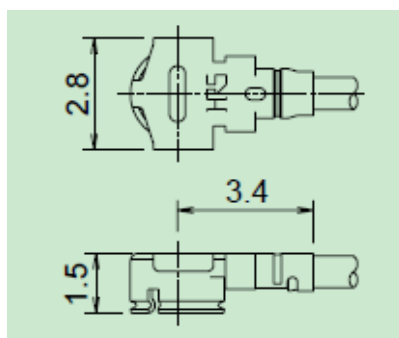
The RF connector in module side is a ultra small surface mount coaxial connectors (Part Number: U.FL-R-SMT, vended by HRS). It has high performance with wide frequency range, surface mountable and reflows solderable. Following is parameter (Figure 36). Certainly the user can visit <http://www.hirose-connectors.com/> for more information.

To get good RF performance in customer's design, we suggest the customer to use the matching RF adapter cable which is also supplied by HRS (Part Number: U.FL-LP (V) -040), the following figure 41 is the dimensions of U.FL series RF adapter cable. The customer can get it from the cable's manufacturer HRS, and for details, please visit <http://www.hirose-connectors.com/>.



Unit:mm

Figure 3: U.FL-R-SMT



Unit:mm

**Consideration for antenna selection**

SIM900B module is to be used in mobile or fixed applications only. For other antenna(s) selection, the antenna gain including cable loss must not exceed 7.3 dBi in the 850 MHz Cellular band and 9.0 dBi in the PCS 1900 MHz band, for the purpose of satisfying the requirements of FCC 2.1043 and 2.1091.

**Consideration for antenna installation**

The antenna used for this module must be installed to provide a separation distance of at least 20 cm from all persons, and must not be co-located or operating in conjunction with other antennas or transmitters within a host device, except in accordance with FCC multi-transmitter product

procedures. Compliance of this module in all final product configurations is the responsibility of the Grantee. OEM integrators must be provided with specific information required to satisfy RF exposure compliance for all final host devices and installations.

**Consideration for antenna maintain**

OEM integrators can replace the antenna by themselves. They should comply with **Consideration for antenna selection and Consideration for antenna installation.**