# User Manual

The CA100 module can be interfaced with the user's Board through the 20 pin connector designated as GB052A- 20S- H22- TSD- B. This is a standard commercial connector.

Remote Play, Inc. software is the only software authorized to operate the module. The software must be integrated by Remote Play, Inc.

In order to allow proper operation of the module, the antennas are permanently attached to the module and their shape needs to adhere to the shape below. The antennas must have "guides" to make sure that the antennas comply with the authorized shape as is shown below:

TX Antenna

	CA-100 Module	
	Top View	
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The module connector pins are shown in the schematics and should be only used with Remote Play, Inc. Software version RPI-CA100-10. The Vcc voltage must be 3 volts +/- 10% and all the digital signals comply with standard CMOS "1" and "0" requirements. The maximum RSSI signal is 1.6 volts.

The maximum data rate that Remote Play, Inc. uses in this module is 16 kbps.

The minimum hopping frequency is 907 Mhz.

The maximum hopping frequency is 923 Mhz

The maximum peak power is less than 7 dBm using any bandwidth.

The minimum sensitivity is -103 dBm.

Typical communication range is > 500 feet

# Installation Instructions

- 1. The module is ESD sensitive and should be handled accordingly. Make sure that a ground strip is used at all time.
- Before connecting the module make sure that the connection pins adhere to the specs:
  a. Pins 1,3, 5,6, 16, 17, 18 19 and 20 are properly grounded.

- b. Pin 8 should be connected to the power supply. 3 volts controlled (+/-10%)
- c. Pin 2 carries an analog RSSI signal and should be routed to avoid close digital lines.
- d. The rest of the pins are digital pins carrying data and signaling with "1" as 3 volts and 0 as "0". They should adhere to CMOS type levels.
- 3. The RF module has its own regulation but the input voltage should be kept within 10% of 3 volts.
- 4. The device having the module must have a label that states" contains FCC ID: ST2-CA100" besides other required FCC labels for that device.
- 5. Make sure that the antennas used are not modified and must not be co-located or operated in conjunction with any other antenna or transmitter.

## FCC Statement

The module itself must have a FCC Identifier, "FCC ID: ST2-CA100".

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: The user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Additional radiated spurious emission evaluation for the additional host device may be required.

### Statement needed to be shown on End Product

Since this module is installed inside the end product, the end product should be affixed a label on visible area showing this product contains a RF model, and also its FCC ID.

### **Important Note**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The OEM integrator has to be aware not to provide information to the end use regarding how to install or remove this RF module in the user manual of the end product which integrate this module.