

# Operation Guide

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1. The antenna and pin header is necessary to be soldered by the user. Although a 90° pin header is provided, an 180° pin header can also be used according to specific product applications. It is preferable to place the antenna perpendicular to the ground and locate it away from metal objects to achieve the optimal performance.
2. Insert the module into the socket of the transmitter module evaluation board, BCM-GENTX-X01 after completing soldering. Make sure that the power switch on the evaluation board is in the off state before an insertion.
3. Insert a CR2032 battery and switch the power switch to the ON state. After power-on the master MCU, the BC68F2123, will execute an initialization process and after which the device will enter the power saving mode.
4. When one of the buttons, KEY1~KEY4, is pressed, the master MCU, the BC68F2123, will be woken up. The device will transmit a corresponding RF signal and turn on the LED. The press time should be greater than 40ms. If the press time is less than 40ms, it will be regarded as a noise and be ignored. Each time a press action is confirmed, the transmitter module will transmit signals twice.
5. After the pressed button is released, the transmitter module will stop transmitting the RF signal and turn off the LED. If no button is pressed for a period of time, the transmitter module will enter the power saving mode.
6. Troubleshooting: When a proper battery is inserted and the power is switched on, the power indicator, LED2, should be turned on. If the LED2 is not illuminated, check the battery voltage level and the power switch. Each time a button is pressed, the TX\_LED will also be illuminated. If the LED is not illuminated, check whether the transmitter module is properly inserted in the socket.

## Pin Function



This module has 12 pins. The top left pin in the above picture is pin 1.

Pin#	Name	Function
1	GND	Power Ground
2	Vdd	Power Supply, with a voltage range of 2.2V~3.6V.
3	VddRF	Power Supply for RF circuit The power supply has a voltage range of 2.2V~3.6V.
4	OCSDSA	MCU OCDS data pin This pin is used in programming mode.
5	OCDSCK	MCU OCDS clock pin This pin is used in programming mode.
6	TX_LED	TX_LED driving pin, active low. When the transmitter module transmits a signal, this pin will be in a low state to turn on the LED when connected to the evaluation board.
7	KEY1	Input pin, active low. If this pin is in a low level, it will trigger the module to transmit a signal when connected to the evaluation board.
8	KEY2	Input pin, active low. If this pin is in a low level, it will trigger the module to transmit a signal when connected to the evaluation board.
9	KEY3	Input pin, active low. If this pin is in a low level, it will trigger the module to transmit a signal when connected to the evaluation board.
10	KEY4	Input pin, active low. If this pin is in a low level, it will trigger the module to transmit a signal when connected to the evaluation board.
11	Reserved1	Not used
12	Reserved2	Not used