

Description of Operation

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EUT is a [Wireless USB cradle](#) with 12 channels (2402~2470MHz). EUT use to eliminate bothersome cables and maximize your working space anytime anywhere. It's cordless works up to 10 meters from your [PC or notebook](#).

General Operational Description:

1. Time base of the transmission frequency:

For RF frequency, Crystal is a clock reference.

2. Synthesizer:

Synthesizer inside RF Transceiver IC and operate frequency in 2.4GHz ISM Band. Internal voltage controlled oscillator (VCO) provides the desired LO signal base on the phase-locked loop (PLL) with a relatively wide tuning range for this application.

3. Transmission:

The EUT data is processed by MCU Controller Unit and is applied to Transceiver IC for [GFSK](#) modulation. The VCO inside RF Transceiver IC is controlled by this data. The RF signal is amplified to the rated output power by power amplifier inside RF Transceiver IC, and is to the antenna after suppression of spurious emissions through antenna matching network.

4. Receiver:

The antenna matching network suppresses unwanted radiation ar receive direction. Then 2.4GHz RF signal will be directly down to IF signal and demodulated to digital data by the RF Transceiver IC.

5. Base band Processing:

Channel Setting: Frequency channel is easily programmable by use of the 5-wire interface. Channel Setting is controlled by MCU

Data Modulation: GFSK modulation type, it is controlled by RF Transceiver IC.

Power Control Level: Output power is easily programmable by use of the 5-wire interface. Output power is controlled by MCU.

Transmit/Receive Switch: Not-applicable

6. Interface: [USB](#)

7. Power: Input [6Vdc](#) from Adapter. This power is provided to regulator components to regulated DC power.

Items	Description
Product Type	USB 2.4GHz CRADLE
Radio Type	Intentional Transceiver
Power Type	Adapter
Interface Type	USB
Modulation	GFSK
Frequency Range	2400 ~ 2483.5MHz
Channel Number	12
Channel Band Width (99%)	1.00 MHz
Max. Field Strength	70.54 dBuV/m at 3m (Average)