

## RF Exposure Evaluation declaration

|              |                             |
|--------------|-----------------------------|
| Product Name | Bluetooth Wireless Keyboard |
| Model No.    | FOLIO KEY                   |
| FCC ID       | E8HKT1253                   |

|           |   |
|-----------|---|
| Applicant | Chicony Electronics Co., Ltd.   |
| Address   | No.25 Wu-Gong 6th Rd. Wugu Dist., New Taipei City 248, Taiwan, R.O.C. |

|                     |                    |
|---------------------|--------------------|
| Date of Receipt     | Feb. 05, 2013      |
| Date of Declaration | Feb. 20, 2013      |
| Report No.          | 132133R-RFUSP43V01 |

The declaration results relate only to the samples calculated.

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## 1. RF Exposure Evaluation

### 1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| Frequency Range (MHz)                                     | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm <sup>2</sup> ) | Average Time (Minutes) |
|---|-------------------------------|-------------------------------|-------------------------------------|------------------------|
| (A) Limits for Occupational/ Control Exposures            |                               |                               |                                     |                        |
| 300-1500  | --                            | --                            | F/300                               | 6                      |
| 1500-100,000  | --                            | --                            | 5                                   | 6                      |
| (B) Limits for General Population/ Uncontrolled Exposures |                               |                               |                                     |                        |
| 300-1500  | --                            | --                            | F/1500                              | 6                      |
| 1500-100,000  | --                            | --                            | 1                                   | 30                     |

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = gain of antenna in linear scale

$\pi$  = 3.1416

R = distance between observation point and center of the radiator in cm

$P_d$  is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

### 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

### 1.3. Test Result of RF Exposure Evaluation

Product : Bluetooth Wireless Keyboard  
Test Item : RF Exposure Evaluation  
Test Site : No.3 OATS

#### Antenna Gain

Antenna Gain: The maximum Gain measured in fully anechoic chamber is  $-0.99\text{dBi}$  in logarithm scale.

#### 1Mbps (GFSK)

##### Output Power Into Antenna & RF Exposure Evaluation Distance ( $-0.99\text{dBi}$ ):

| Channel | Frequency (MHz) | Output Power to Antenna (mW) | Power Density at R = 20 cm (mW/cm <sup>2</sup> ) |
|---------|-----------------|------------------------------|--|
| 00      | 2402.00         | 1.6711                       | 0.000265   |
| 38      | 2441.00         | 1.7022                       | 0.000270   |
| 79      | 2480.00         | 1.7338                       | 0.000275   |

Power density in column 4 is much lower than the limit ( $1\text{ mW/cm}^2$ ).