




## RF Exposure Evaluation Declaration

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**FCC ID:** 2AKWYPFB201  
**APPLICANT:** DynaScan Technology Corp.  
**Application Type:** Certification  
**Product:** Control Board  
**Model No.:** PFB201  
**Brand Name:** **DynaScan**  
**FCC Rule Part(s):** Part 2.1091 (Mobile)  
**Test Procedure(s):** KDB 447498 D01v06  
**Test Date:** January 17~19, 2017

Reviewed By : 

( Paddy Chen )

Approved By : 

( Chenz Ker )



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Taiwan) Co., Ltd.

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## Revision History

Report No.	Version	Description	Issue Date	Note
1701TW0701-U2	1.0	Original Report	2017.01.19	

## 1. PRODUCT INFORMATION

### 1.1. Equipment Description

Product Name	Control Board
FCC ID	2AKWYPFB201
Model No.	PFB201
Brand Name	<b>DynaScan</b>
Supports Radios Spec.	WLAN : 2.4G : 802.11b/g/n-20/n-40
Wi-Fi Specification	802.11b/g/n
Frequency Range	<b>2.4GHz:</b> For 802.11b/g/n-20M: 2412 ~ 2462 MHz For 802.11n-40M: 2422 ~ 2452 MHz
Type of Modulation	802.11b: DSSS, DBPSK, DQPSK, CCK 802.11g/n-20M/n-40M: OFDM( BPSK, QPSK, 16QAM, 64QAM )

### 1.2. Antenna Description

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Walsin	WE9G650002	Metal	0.87 dBi

## 2. RF Exposure Evaluation

### 2.1. 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	30
1500-100,000	--	--	1.0	30

f= Frequency in MHz

Calculation 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, 1mW/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.

## 2.2. Test Result of RF Exposure Evaluation

Antenna Gain: refer to the section 1.2; the maximum Gain measured in fully anechoic chamber is 1dBi for Bluetooth Module.

**For 2.4GHz ISM Band (802.11b/g/n-HT20/n-HT40):**

Frequency Band (MHz)	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412 ~ 2462	23	199.5	0.87	20	0.0485	1

————— The End —————