

# ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LOW-POWER, NON-LICENSED TRANSMITTER

**Test Report No.** : W153R-D019  
**AGR No.** : A153A-174R  
**Applicant** : PROCHILD INC.  
**Address** : RM.806, 8FL, KURO ACE TECHNO TOWER #197-48, KURO, KURO-GU, SEOUL, 152-053, Korea  
**Manufacturer** : PROCHILD INC.  
**Address** : RM.806, 8FL, KURO ACE TECHNO TOWER #197-48, KURO, KURO-GU, SEOUL, 152-053, Korea  
**Type of Equipment** : DIAPER ALERT  
**FCC ID.** : 2AEEY-PAA-100  
**Model Name** : PAA-100  
**Serial number** : N/A  
**Total page of Report** : 6 pages (including this page)  
**Date of Incoming** : March 16, 2015  
**Date of issue** : March 26, 2015

## SUMMARY

The equipment complies with the regulation; *FCC PART 15 SUBPART C Section 15.247*  
 This test report only contains the result of a single test of the sample supplied for the examination.  
 It is not a generally valid assessment of the features of the respective products of the mass-production.

Reviewed by:   
 Ki-Hong, Nam / Asst, Chief Engineer  
 ONETECH Corp.

Approved by:   
 Sung-Ik, Han/ Managing Director  
 ONETECH Corp.

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### Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
W153R-D019	March 26, 2015	Initial Issue	All

## 1. VERIFICATION OF COMPLIANCE

Applicant : PROCHILD INC.  
Address : RM.806, 8FL, KURO ACE TECHNO TOWER #197-48, KURO, KURO-GU, SEOUL, 152-053, Korea  
Contact Person : Rak-Gon, Ko / Chief R&D Center Manager  
Telephone No. : +82-2-2619-9662  
FCC ID : 2AEEY-PAA-100  
Model Name : PAA-100  
Serial Number : N/A  
Date : March 26, 2015

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	DIAPER ALERT
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

## 2. GENERAL INFORMATION

### 2.1 Product Description

The PROCHILD INC., Model PAA-100 (referred to as the EUT in this report) is a DIAPER ALERT. The product specification described herein was obtained from product data sheet or user's manual.

Device Type	DIAPER ALERT
Temperature Range	-25 °C ~ +75 °C
Operating Frequency	2 402 MHz ~ 2 480 MHz
RF Output Power	0.69 dBm
Number of Channel	40 Channel
Modulation Type	GFSK
Antenna Type	PCB Antenna
USED RF CHIP	Marker: PROCHILD INC. Model Name: N/A
Antenna Gain	0.544 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	32.768 kHz

### 2.2 Alternative type(s)/model(s); also covered by this test report.

-. None

## 3. EUT MODIFICATIONS

-. None

## 4. RADIO FREQUENCY EXPOSURE

### 4.1 RF Exposure Limit

According to the FCC rule §1.1310, the limit for General Population/Uncontrolled exposure is 1 mW/cm<sup>2</sup> for the device operating 1 500 ~ 100 000 MHz.

### 4.2 EUT Description

Kind of EUT	DIAPER ALERT
Operating Frequency Band	<input type="checkbox"/> Wireless Microphone: 494.000 MHz ~ 501.000 MHz and 498.200 MHz ~ 505.200 MHz <input type="checkbox"/> WLAN: 2 412 MHz ~ 2 462 MHz <input type="checkbox"/> WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz <input type="checkbox"/> WLAN: 5 745 MHz ~ 5 825 MHz <input checked="" type="checkbox"/> Bluetooth BLE: 2 402 MHz ~ 2 480 MHz
Device Category	<input checked="" type="checkbox"/> Portable (< 20 cm separation) <input type="checkbox"/> Mobile (> 20 cm separation) <input type="checkbox"/> Others
Max. Output Power	0.69 dBm
Used Antenna	PCB Antenna
Used Antenna Gain	0.544 dBi
Exposure Evaluation Applied	<input type="checkbox"/> MPE <input type="checkbox"/> SAR <input checked="" type="checkbox"/> N/A

### 4.3 Test Result

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Mim. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

$$= (1.172/5) \times \sqrt{2.402} = 0.363$$

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

	Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
BLE (GFSK)	2 402	0 ± 1.0	1.0	1.172	5	0.363