RF EXPOSURE REPORT

Product:	PX Communication Module
Model Name:	CM7A-NE-1E0
FCC ID:	V5PCM7ABW
Applicant:	PAX Technology Limited
Address:	Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Road, Wanchai, Hong Kong
Manufacturer:	PAX Computer Technology (Shenzhen) Co., Ltd.
Address:	4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C.
Prepared by:	BV 7Layers Communications Technology (Shenzhen) Co. Ltd
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Report No.:	SA171117W002
Received Date:	Nov. 13, 2017
Test Date:	Nov. 13, 2017 ~ Dec. 11, 2017
Issued Date:	Dec. 13, 2017

This report should not be used by the client to claim product certification, approval, or endorsement by A2LA or any government agencies.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA171117W002	Original release	Dec. 13, 2017

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1 CERTIFICATION

PRODUCT:	PX Communication Module
BRAND NAME:	PAX
MODEL NAME:	CM7A-NE-1E0
APPLICANT:	PAX Technology Limited
TESTED:	Nov. 13, 2017 ~ Dec. 11, 2017
TEST SAMPLE:	Production Unit
STANDARDS:	**FCC Part 2 (Section 2.1091)**
	FCC OET Bulletin 65, Supplement C (01-01)
	KDB 447498 D01 General RF Exposure Guidance v06
	IEEE C95.1

The above equipment has been tested by **Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _____ , **DATE:** Dec. 13, 2017
(Yuqiang Yin/ Engineer)

APPROVED BY : _____ , **DATE:** Dec. 13, 2017
(Bill Yao / Manager)

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	PX Communication Module	
MODEL NAME	CM7A-NE-1E0	
NOMINAL VOLTAGE	3.3Vdc (host equipment)	
OPERATING TEMPERATURE RANGE	-10 ~ 50℃	
MODULATION TYPE	**WLAN**	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
	Bluetooth	GFSK, π/4-DQPSK, 8DPSK
	BT_LE	BT-LE(GFSK) for DTS
OPERATING FREQUENCY	**WLAN**	2412 ~ 2462MHz for 11b/g/n(HT20)
	Bluetooth/BT_LE	2402MHz ~ 2480MHz
ANTENNA TYPE	PCB Antenna with 2dBi gain	
HW VERSION	CM7A-XX-XXX	
SW VERSION	25.00.XXXX	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	N/A	

NOTE:
1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. The product is a module in host (PX7A BW) test configuration.

3 RF EXPOSURE

3.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm^2)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	…	…	F/1500	30
1500-100,000	…	…	1.0	30

F = Frequency in MHz

3.2 MPE CALCULATION FORMULA

Pd = (Pout*G) / (4*pi*r2)

where

Pd = power density in mW/cm2

Pout = 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

3.3 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Approval**.

3.4 CONDUCTED POWER

WIFI 2.4G

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
1	2412	16.42	N/A
6	2437	**16.74**	N/A
11	2462	16.57	N/A

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
1	2412	15.14	N/A
6	2437	15.98	N/A
11	2462	15.17	N/A

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
1	2412	14.58	N/A
6	2437	14.79	N/A
11	2462	14.89	N/A

Bluetooth

GFSK

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
0	2402	**9.62**	N/A
39	2441	9.23	N/A
78	2480	9.03	N/A

DQPSK

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
0	2402	4.83	N/A
39	2441	4.95	N/A
78	2480	5.11	N/A

8DPSK

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
0	2402	4.98	N/A
39	2441	5.02	N/A
78	2480	5.34	N/A

BT-LE (GFSK)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
0	2402	8.17	N/A
19	2440	7.83	N/A
39	2480	7.81	N/A

3.5 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

TUNE-UP POWER TABLE

Band	Frequency (MHz)	Operating Mode	Tune-Up Power And Tolerance (dBm)
Bluetooth	2402	BT_GFSK	9.5 ± 0.5
WIFI 2.4G	2437	11b	16.5 ± 0.5

BT & WIFI 2.4G

Band	Frequency (MHz)	Operating Mode	Antenna Gain (dBi)	Tune-up Power (dBm)	E.I.R.P Power (mW)	Power Density (mW/cm^2)	limit (mW/cm^2)	PASS / FAIL
Bluetooth	2402	BT_GFSK	2	10.0	0.316	0.000	1.00	PASS
WIFI 2.4G	2437	11b	2	17.0	79.433	0.016	1.00	PASS

--END--