

## RF EXPOSURE REPORT

**REPORT NO.:** SA140715C03

**MODEL NO.:** PX\* (\* can be 0~9, A~Z or Blank)

FCC ID: HFS-PX3

**RECEIVED:** Jul. 15, 2014

**TESTED:** Jul. 25 ~ Aug. 14, 2014

**ISSUED:** Aug. 27, 2014

**APPLICANT:** Quanta Computer Inc

ADDRESS: 188 Wen Hwa 2nd Rd., Kuei Shan Hsiang Tao

Yuan Hsien Taiwan

**ISSUED BY:** Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist.,

New Taipei City, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei

Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.



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## **RELEASE CONTROL RECORD**

ISSUE NO.	NO. REASON FOR CHANGE	
SA140715C03	Original release.	Aug. 27, 2014

Report No.: SA140715C03 3 of 6 Report Format Version 5.0.1



## 1. CERTIFICATION

**PRODUCT:** Quanta Video Presence Solution

**MODEL:** PX\* (\* can be 0~9, A~Z or Blank)

**BRAND**: Quanta

**APPLICANT:** Quanta Computer Inc

**TESTED:** Jul. 25 ~ Aug. 14, 2014

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 2 (Section 2.1091)

KDB 447498 D03

**IEEE C95.1** 

The above equipment (Model: PX3) has been tested by Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan 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: Cline Chou / Specialist , DATE: Aug. 27, 2014

, **DATE** : Aug. 27, 2014 APPROVED BY:

Ken Liu / Senior Manager



## 2. RF EXPOSURE

## 2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)			AVERAGE TIME (minutes)			
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE							
300-1500	300-1500		F/1500	30			
1500-100,000	1500-100,000		1.0	30			

F = Frequency in MHz

#### 2.2 MPE CALCULATION FORMULA

 $Pd = (Pout*G) / (4*pi*r^2)$ 

where

Pd = power density in mW/cm<sup>2</sup>

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

#### 2.3 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 Device**.



### 2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm²)
2412-2462	18.25	2.87	20	0.026	1
5180-5240	7.98	3.58	20	0.003	1
5736-5814	6.65	4.21	20	0.002	1

FREQUENCY BAND (MHz)	MAX POWER (dBuV/m)	MAX POWER (dBm)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm²)
6336-7920	72.59	-32.17	20	0.0000001	1

<sup>\*</sup> Max. Power of UWB Band was provided by client.

#### **CONCULSION:**

The WLAN 2.4G & WLAN 5G & UWB Band can transmit simultaneously, the formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 + .....etc. < 1

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4G + WLAN 5.0G + UWB = 0.026 + 0.003 + 0.0000001 = 0.0290001

Therefore, the maximum calculation of this situation is 0.0290001, which is less than the "1" limit.