



# RF EXPOSURE REPORT

**REPORT NO.:** SA130814E06B

**MODEL NO.:** T77H468

**FCC ID:** B94T77H468

**RECEIVED:** Oct. 29, 2013

**TESTED:** Oct. 31, 2013

**ISSUED:** Dec. 20, 2013

**APPLICANT:** Hewlett-Packard Company

**ADDRESS:** 1501 Page Mill Road Palo Alto, CA 94304  
United States

**ISSUED BY:** Bureau Veritas Consumer Products Services  
(H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

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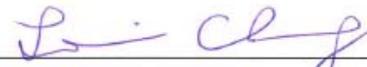
## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130814E06B	Original release	Dec. 20, 2013

## 1. CERTIFICATION

**PRODUCT:** 3GPP Long Term Evolution Cat3 PCI Express M.2 Module  
**BRAND NAME:** FOXCONN  
**MODEL NO.:** T77H468  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**APPLICANT:** Hewlett-Packard Company  
**TESTED DATE:** Oct. 31, 2013  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
FCC OET Bulletin 65, Supplement C (01-01)  
IEEE C95.1

The above equipment (Model: T77H468) 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** :  , **DATE:** Dec. 20, 2013  
( Lori Chung, Specialist )

**APPROVED BY** :  , **DATE:** Dec. 20, 2013  
( May Chen, Manager )

## 2. RF EXPOSURE LIMIT

### 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)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 3. MPE 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

### 4. 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**.



## 5. CALCULATION RESULT OF MAXIMUM TUNE-UP POWER

Channel Frequency (MHz)	Max. Tune-up Power		Mode	Time-solt Duty Cycle	Distance to Human Body (cm)	ERP/EIRP value in OTA (mW)	ERP/EIRP (dBm)	MPE(OTA) value with Time-solt Duty Cycle
	(dBm)	(mW)						
836.6	33.00	1995.262	GPRS 12	50%	20.00	3162.3	35	0.516
836.6	28.00	630.957	EDGE 12	50%	20.00	1258.9	31	0.205
826.4	24.50	281.838	WCDMA B5	100%	20.00	530.9	27.3	0.173
836.52	24.60	288.403	1xEVDO Rev.A	100%	20.00	125.8	21	0.041
824.7	23.80	239.883	Band5 1.4M	100%	20.00	450.8	26.5	0.147
825.5	23.80	239.883	Band5 3M	100%	20.00	476.4	26.8	0.155
826.5	23.80	239.883	Band5 5M	100%	20.00	397.2	26	0.130
829	23.80	239.883	Band5 10M	100%	20.00	408.3	26.1	0.133
1909.8	30.00	1000.000	GPRS 12	50%	20.00	1949.8	32.9	0.194
1909.8	26.00	398.107	EDGE 12	50%	20.00	1023.3	30.1	0.102
1880	24.50	281.838	WCDMA B2	100%	20.00	549.5	27.4	0.109
1880	24.00	251.189	1xEVDO Rev.0	100%	20.00	572.8	27.6	0.114
1880	23.80	239.883	LTE B2 1.4M	100%	20.00	660.7	28.2	0.131
1880	23.80	239.883	LTE B2 3M	100%	20.00	616.6	27.9	0.123
1880	23.80	239.883	LTE B2 5M	100%	20.00	631	28	0.126
1855	23.80	239.883	LTE B2 10M	100%	20.00	562.3	27.5	0.112
1857.5	23.80	239.883	LTE B2 15M	100%	20.00	575.4	27.6	0.114
1860	23.80	239.883	LTE B2 20M	100%	20.00	524.8	27.2	0.104
1850.7	23.80	239.883	LTE B25 1.4M	100%	20.00	524.8	27.2	0.104
1851.5	23.80	239.883	LTE B25 3M	100%	20.00	501.2	27	0.100
1860	23.80	239.883	LTE B25 5M	100%	20.00	478.6	26.8	0.095
1855	23.80	239.883	LTE B25 10M	100%	20.00	524.8	27.2	0.104
1857.5	23.80	239.883	LTE B25 15M	100%	20.00	501.2	27	0.100
1860	23.80	239.883	LTE B25 20M	100%	20.00	562.3	27.5	0.112
1732.6	24.50	281.838	WCDMA B4	100%	20.00	354.8	25.5	0.071
1710.7	23.80	239.883	LTE B4 1.4M	100%	20.00	616.6	27.9	0.123
1711.5	23.80	239.883	LTE B4 3M	100%	20.00	602.6	27.8	0.120
1712.5	23.80	239.883	LTE B4 5M	100%	20.00	588.8	27.7	0.117
1715	23.80	239.883	LTE B4 10M	100%	20.00	549.5	27.4	0.109
1717.5	23.80	239.883	LTE B4 15M	100%	20.00	489.8	26.9	0.097
1720	23.80	239.883	LTE B4 20M	100%	20.00	467.7	26.7	0.093
779.5	23.40	218.776	LTE B13 5M	100%	20.00	327.3	25.1	0.107
782	23.40	218.776	LTE B13 10M	100%	20.00	285.1	24.5	0.093
706.5	24.00	251.189	LTE B17 5M	100%	20.00	384.6	25.9	0.126
709	24.00	251.189	LTE B17 10M	100%	20.00	412.1	26.2	0.135

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