


RF EXPOSURE REPORT

Applicant: OF
Quanta Computer Inc.
No.188, Wenhua 2nd Rd., Guishan Dist., Taoyuan City,
Taiwan (R.O.C.)

Product Name: VR Controller

Brand Name:  , HP, HP Inc.

Marketing Name: HP Reverb G2 Controllers

Model No.: TPC-Q077-C2

Model Difference: N/A

Report Number: E2/2020/60062

FCC ID HFS-A85KL

FCC Rule Part Part 2.1093

Issue Date: Jul. 31, 2020

We hereby certify that:

The data evaluation in this report is in compliance with FCC Rules Part 2.
The results of this report relate only to the sample identified in this report.

Approved By:

John Teh

Yeh John / Asst. Manager



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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Revision History

Report Number	Revision	Description	Issue Date	Remark
E2/2020/60062	Rev.00	Original.	Jul. 31, 2020	Revised By: Yuri Tsai

Note:**1. Multiple Model numbers or Trademarks**

The variant trademarks are assessed as identical in hardware and software to each other, hence all variants are fully covered by the test results in this test report without further verification test.

2. Disclaimer

Antenna information and Variant information among trademarks are provided by the applicant, the test results of this report are applicable to the sample EUT received.

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1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)

1.1 General Information

Product Name:	VR Controller
Brand Name:	 , HP, HP Inc.
Marketing Name:	HP Reverb G2 Controllers
Model No.:	TPC-Q077-C2
Model Difference:	N/A
Hardware Version:	N/A
Software Version:	N/A
Power Supply:	3Vdc from AA Battery*2

1.2 Maximum Output power

The Max. output power value is derived from below test report(s).

Report Number:	E2/2020/60057
Test Lab:	SGS Taiwan Ltd.

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2 STANDARD APPLICABLE

2.1 Standard Applicable:

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

As per KDB 447498 D01 4.3.1,

Step a: For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g Head & Body SAR and ≤ 7.5 for 10-g extremity Hand SAR, where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in **step b)** below

Step b: For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following (also illustrated in Appendix B):

- 1) $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)]\}$ mW, for 100 MHz to 1500 MHz
- 2) $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot 10]\}$ mW, for > 1500 MHz and ≤ 6 GHz

2.2 Measurement Result:

Step a:				
This is a portable device and the max. output power including tune-up tolerance is 2.642 (mW), lower than the threshold given and derived as formula given above, where				
$=2.642(\text{mW})/5(\text{mm}) \cdot \sqrt{2.441 (\text{GHz})} = 0.826 < 3.0$				
Frequency (MHz)	Max. output power including tune-up tolerance(dBm)	Max. output power including tune-up tolerance(mW)	Distance (mm)	Result
2441	4.22	2.642	5	0.826

As the result of calculation result indicates, the RF exposure generating from given transmitter (transmitter employed digital modulation) can be excluded from SAR measurement, and is deemed compliant with RF exposure as per FCC.

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2.3 The table of quick reference in terms of power threshold

Appendix A

SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	<i>SAR Test Exclusion Threshold (mW)</i>
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	
MHz	30	35	40	45	50	mm
150	232	271	310	349	387	<i>SAR Test Exclusion Threshold (mW)</i>
300	164	192	219	246	274	
450	134	157	179	201	224	
835	98	115	131	148	164	
900	95	111	126	142	158	
1500	73	86	98	110	122	
1900	65	76	87	98	109	
2450	57	67	77	86	96	
3600	47	55	63	71	79	
5200	39	46	53	59	66	
5400	39	45	52	58	65	
5800	37	44	50	56	62	

Note: 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g *SAR Test Exclusion Thresholds* indicated above. These thresholds do not apply, by extrapolation or other means, to occupational exposure limits.

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