

Page: 1 of 6

## RF EXPOSURE REPORT

OF

Quanta Computer Inc. Applicant:

No. 188, Wenhua 2nd Road, Guishan District, Taoyuan City 33377,

Taiwan

**Product Name:** Clover Mini Enterprise/Clover Station Pro Terminal

**Brand Name:** clover

Model No.: C303, C503

**Model Difference:** C303 is a standalone POS terminal. C503 includes the same POS

terminal (C303) but comes with an included peripheral display

(S503).

**Report Number:** E2/2019/60011

FCC ID: HFS-CX03U

IC: 1787B-CX03U

Part 2.1091 & RSS-102 **FCC Rule Part:** 

IC Rule Part: RSS-102

**Issue Date:** Jul. 12, 2019 Date of EUT Received: Jun. 14, 2019

#### We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. The test data, data evaluation in this report is in compliance with FCC Rules Part 2 and RSS-102.

The test results of this report relate only to the tested sample identified in this report.

Approved By:







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. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeilndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號 GS Taiwan Ltd. t (886-2) 2299-3279

台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Page: 2 of 6

# **Revision History**

Report Number Revision		Description Effected Page		Issue Date	Revised By
E2/2019/60011	Rev.00	Initial creation of document	All	Jul. 12, 2019	Karen Huang

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. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

解非另有說明・此報告結果性勢測就之樣品負責・同時此樣品僅保留別大。本報告未經本公司曹面許可,不可部份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*Cataiwan Ltd\*\* No.134 Withun Drazifical Park Withun District New Tainei City Taiwan 24803/ 48 th \*\* Taiwan 24803 (48 th \*\*

|No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Page: 3 of 6

# **Table of Contents**

1	DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	. 4
2	MAXIMUM PERMISSIBLE EXPOSURE (MPE)	. 5
	2.1 FCC STANDARD APPLICABLE	5
	2.2 POWER DENSITY CALCULATION (WORST CASE)	6

t (886-2) 2299-3279

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.

陈非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\* [No.134. WuKunoRoad.NewTaipeiIndustrialPark.WukuDistrict.NewTaipeiCity.Taiwan24803/新北市五股區新北彥業園區五工路 134 號

|No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Page: 4 of 6

# **DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)**

Product Name:	Clover Mini Enterprise/Clover Station Pro Terminal			
Brand Name:	clover			
Model No.:	C303, C503			
Model Difference:	C303 is a standalone POS terminal. C503 includes the same POS terminal (C303) but comes with an included peripheral display (S503)			
Hardware Version:	4.01			
Software Version:	N/A			
Micro Hub:	Model No.: H303, Supplier: clover			
	12V from Hub and Adapter			
Power Supply:	Battery: Model No.: YJ3B, Supplier: N/A			
	Adapter: Model No.: FSP040-RHBN3, Supplier: FSP			

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.

陈非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\* [No.134. WuKunoRoad.NewTaipeiIndustrialPark.WukuDistrict.NewTaipeiCity.Taiwan24803/新北市五股區新北彥業園區五工路 134 號

|No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Page: 5 of 6

# 2 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

## 2.1 FCC 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.

This is a Mobile device, the MPE is required.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for Maximum Permissive Exposure (MPE)

Frequency Range	Electric Field	Magnetic Field	Power Density	Averaging Time		
(MHz)	Strength (V/m)	Strength (A/m)	(mW/cm <sup>2</sup> )	(minute)		
Limits for General Population/Uncontrolled Exposure						
0.3-1.34	614	1.63	*(100)	30		
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30		
30-300	27.5	0.073	0.2	30		
300-1500	/	/ / f/1500		30		
1500-15000	/	/	1.0	30		

f = frequency in MHz

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. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134, WuKungRoad, NewTaipeiIndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

<sup>\* =</sup> Plane-wave equipment power density



Page: 6 of 6

### 2.2 Power Density Calculation (Worst Case)

Operation Mode	Evaluation Frequency (MHz)	Operation Distance (cm)	Max. output Power (dBm)	Antenna Gain (dBi)	Max. output Power EIRP (mW)	Power Density (mW/cm²)	Limit (mW/cm²)	Pass / Fail
BT	2480.00	20	6.99	2.10	8.11	0.002	1.000	Pass
WLAN 2.4G	2437.00	20	19.77	2.10	153.82	0.031	1.000	Pass
WLAN 5G	5580.00	20	20.49	5.86	431.52	0.086	1.000	Pass
WWAN	1857.50	20	23.26	1.00	266.69	0.053	1.000	Pass

**Note:** For conservativeness, the lowest uplink frequency of each band is used to determine the MPE limit of that band.

~ End of Report ~

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. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

原并另有說明,正報告結果性質測配之樣而且真,同時比樣而僅恢留則大。本報告未經本公司書間計可,不可能財復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No. 134, WuKungRoad, NewTaipeiIndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488